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产品技术手册
炎症

Medix Biochemica

目录

简介

炎症是免疫系统对感染或组织损伤的应答。急性炎症是一种通过召集血细胞杀死入侵的微生物，启动感染物或受损组织的去除，从而促进伤口愈合的机制。急性炎症典型的症状包括皮肤发红、肿胀、发热和疼痛。如果炎症持续，将变成慢性炎症，最后会引起慢性疾病，包括动脉粥样硬化、癌症、阿尔茨海默氏症或自身免疫疾病。基于这个原因，炎症已开始成为医疗领域研究最多的课题之一。

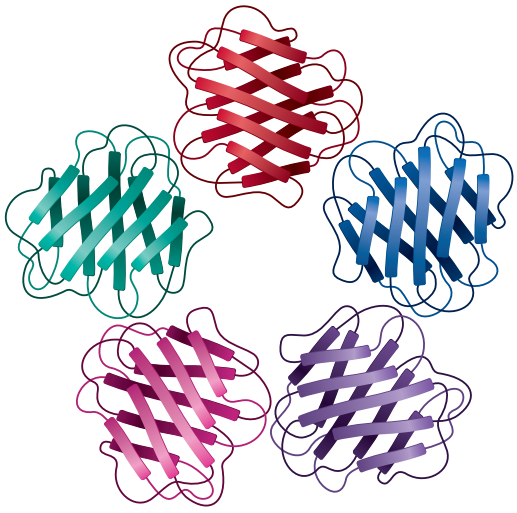
C-反应蛋白 (CRP) 是诊断炎症常用的生物标志物，通过检测血液样本中的CRP水平来确认炎症是否是由细菌引起的。如果CRP水平升高，医生会开抗生素来治疗细菌感染。如果炎症是由病毒入侵引起的，CRP水平通常不会上升，因此不需要抗生素。高敏CRP (hs-CRP) 有时被用于检测慢性炎症，当测量CRP基线浓度 (如正常值) 时，hs-CRP比标准CRP更准确。近来，其它标志物 (如降钙素原 (PCT) 和血清淀粉样蛋白A (SAA)) 在诊断急性炎症时也用得越来越广泛。

Medix Biochemica将炎症标志物作为重点关注领域进行相关研究，近40年来集团一直处于单克隆抗体研发的前沿，应用先进的体外生产方法，保证良好的批间一致性。Medix Biochemica还提供大量抗原和生物样本，可用于分析验证和作为对照材料。

在本技术手册中，我们介绍了Medix Biochemica炎症领域的相关产品。技术手册的重点是通过应用数据来展示产品的性能。本技术说明中展示的结果基于未经优化的检测方案，只是为了初步验证能够用于临床样本检测分析。为获得最佳性能，可能需要进一步的优化。登录www.cnmedixbiochemica.com可查询完整的产品清单。

C-反应蛋白 (CRP)

C-反应蛋白 (CRP) 得名于它沉淀C-肺炎链球菌多糖的能力。CRP作为对一系列炎症细胞因子的应答被分泌。它主要的生物学作用是激活补体系统和炎症过程。更具体地说，CRP结合磷酸胆碱和广泛分布于病原菌多糖和细胞膜.上的有关物质。因此，CRP识别许多致病目的和受损或垂死的宿主细胞的膜，是经典补体路径的主要标志物之一。[1-4]



CRP分子是一个五聚体，即它是由5个相同的多肽组成的，每个多肽含有206个氨基酸残基，分子量23kD。它属于正五聚体蛋白，这是一个进化的保守蛋白家族，具有独特的建筑平面焦圈形环。[7]

体外诊断领域的应用

CRP是最常用的炎症标志物之一。正常情况下，健康人血液中的CRP水平较低，约为1.0-3.0 mg/L。如果患者发生炎症，肝脏会向血液中释放更多的CRP。CRP水平升高可能意味着患者有着严重的健康问题，从而引发炎症的发生。

CRP检测可用于帮助确定或监测急性或慢性情况下的炎症，包括：

- 细菌、病毒和真菌感染会引起CRP水平升高。当CRP浓度为10-50 mg/dL时，感染与病毒的关系更大；当CRP浓度>50 mg/dL时，则提醒急性细菌感染。[7]
- 炎症性肠病，包括克罗恩病和溃疡性结肠炎在内的肠道疾病。
- 自身免疫性疾病，如狼疮、类风湿性关节炎、血管炎等。
- 肺部疾病，如哮喘。

近年来，研究表明CRP水平轻微升高可能与其它几种类型的疾病有关，如心血管疾病或癌症。但是CRP水平与心血管疾病或恶性肿瘤风险之间的生理学关系还没有被完全解释清楚。[5-6]

Medix Biochemica在单克隆抗体方面具有丰富的经验，其诊断用CRP单抗，可以追溯到20世纪80年代，集团的第一批产品鼠抗人CRP单克隆抗体6404和6405就是那时候开发的。自那以后，产品线开始不断进行扩充。

抗人 CRP 单克隆抗体

CRP 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
6402	100145	5	24 months	IgG_1	ELISA, LF, IT
6403	100146	5	36 months	IgG_1	ELISA, LF, IT
6404 SP-2	100058	2.0-2.5	24 months	IgG_1	ELISA, LF, IT, WB
6404 SP-6	100061	> 6	24 months	IgG_1	ELISA, LF, IT, WB
6405	100358	5	18 months	IgG_1	ELISA, LF, IT, WB
6407	100147	5	24 months	IgG_1	ELISA, LF, IT
CRP antibody	HM121	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_1	LF, ELISA
CRP antibody	HM122	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_1	LF, ELISA
CRP antibody	HM573	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_{2b}	LF, ELISA, CLIA
CRP antibody	HM574	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_{2b}	LF, ELISA, CLIA
CRP antibody	HM751	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_1	LF, ELISA
CRP antibody	HM752	Lot dependent	≤ 2 weeks: 2–8°C, LT: -20°C	IgG_1	LF, ELISA

LT=长期保存
所有列表中单克隆抗体的纯度 ≥95%。

CRP 抗原

CRP 抗原	目录号	规格 (mg)	来源	纯度
C-reactive protein human pleural fluid	140-11	0.1, 1, 10, 100	Native	> 99%
C-reactive protein human pleural fluid	140-12	1, 10, 25	Native	> 99%
Recombinant human C-reactive protein (rCRP)	140-11R	0.1, 1, 10	Recombinant	Highly purified
C-reactive protein human pleural fluid	140-13	1	Native	> 95%
C-reactive protein (CRP) antigen	LA378	1	Native	> 95%

配对推荐

捕获抗体 \ 检测抗体	6402	6403	6404	6405	6407	HM121	HM122	HM574	HM752
6402	+	+	+	+	+				
6403	+	+	+	+	–				
6404	+	+	+	+	+				
6405	+	–	+	+	+				
6407	+	–	+	+	+				
HM121							+		
HM122						+			
HM573								+	
HM751									+

未标注结果的配对未做相关验证。

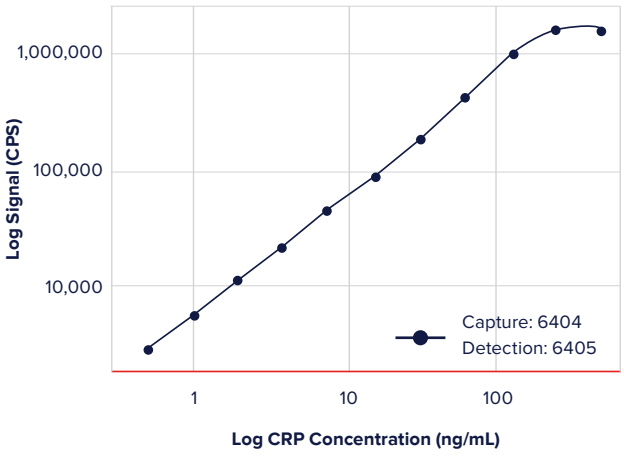
请注意：两种抗体作为配对抗体取决于测定中使用的方法和条件。
CRP是一种五聚体蛋白质，因此相同的抗体可以同时用作捕获抗体和检测抗体。

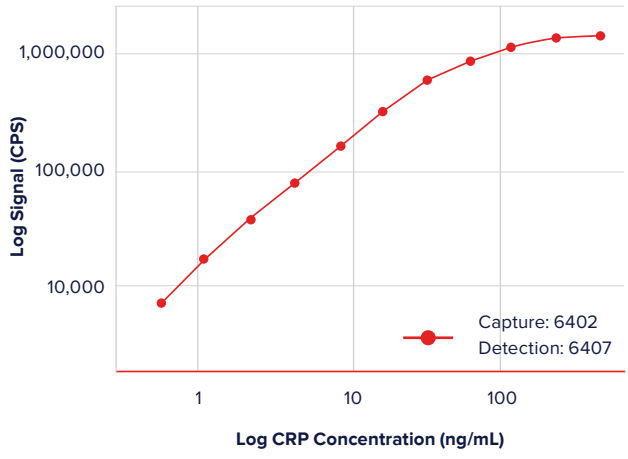
动力学参数

CRP 抗体	结合速率常数k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)	目标蛋白识别
6402	7.3×10^5	1.2×10^{-4}	6.2×10^9	1.6×10^{-10} = 0.16 nM	Human CRP, Ca^{2+} independent
6403	9.6×10^5	1.6×10^{-4}	6.2×10^9	1.6×10^{-10} = 0.16 nM	
6404	$7.7. \times 10^6$	4.1×10^{-4}	1.4×10^{10}	5.3×10^{-11} = 0.05 nM	Human CRP
6405	2.6×10^6	6.6×10^{-5}	3.9×10^{10}	2.6×10^{-11} = 0.03 nM	
6407	1.1×10^6	1.3×10^{-4}	8.9×10^9	1.1×10^{-10} = 0.11 nM	Human CRP, Ca^{2+} independent

抗体-抗原结合反应的结合和解离特性可能对抗体在体外诊断应用中的可用性产生重大影响。

CRP 在免疫荧光平台上的标准曲线





血清淀粉样蛋白A (SAA)

与CRP相似，急性相血清淀粉样蛋白A (SAA) 作为对炎症信号的响应被合成。SAA1和SAA2是在人体中发现的两种主要的SAA类型，是高度同源性蛋白,分子量约12kD。这些蛋白质主要由肝脏产生。[1] 与CRP类似，炎症刺激后数小时内SAA水平升高，且升高幅度可能大于CRP。

体外诊断领域的应用

炎症出现后几小时之内，血液中SAA浓度就会升高。SAA正常的浓度水平介于2mg/L - 8mg/L之间。在急性炎症期，SAA浓度会升高1000倍。因此，SAA和CRP一样，可以作为微生物感染或多种炎症的指标。

- 在几项研究中，SAA已被证明能比CRP提供更多的信息和更高的灵敏度，尤其是在亚临床炎症状态下，以及在接受糖皮质激素或常规或生物免疫抑制治疗的患者中。[2]
- SAA是一种敏感的疾病活动期的生物标志物，也是多种免疫介导的炎症性风湿性疾病 (IRD) 的疾病预后和治疗反应的指标。[2]
- SAA是一种可靠的生物标志物，可用于各类医生在治疗儿童和成人风湿性疾病及其他免疫介导炎症疾病的日常临床实践中。[2]
- SAA与其他炎症标志物 (CRP、PCT) 联合使用，可以帮助医生区分细菌和病毒感染。[3-6]
- 不断增加的证据表明，慢性炎症在诸如各种癌症和心血管疾病等重大疾病的发展和加重过程中有重大意义，以及对这些病人来说，SAA是很好的预示指标。[7-9]

Medix Biochemica可以提供多株单克隆抗体和抗原供SAA检测。

抗人 SAA 单克隆抗体

SAA 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
2201 / RC2201	100279 / 140026	5	18 months / N/D	IgG_{2a} / IgG_1	LF, IT, ELISA
2203	100289	5	18 months	IgG_1	LF, IT, ELISA
2205	100802	5	N/D	IgG_1	LF, IT, ELISA
2208	100805	5	24 months	IgG_1	LF, IT, ELISA
2209	100806	5	N/D	IgG_1	LF, IT, ELISA
2211	100808	5	N/D	IgG_1	LF, IT, ELISA
2212	100809	5	24 months	IgG_1	LF, IT, ELISA
2213	100810	5	N/D	IgG_{2a}	LF, IT, ELISA

N/D = 没有验证

SAA 抗原

SAA 抗原	目录号	规格 (mg)	来源	纯度
Recombinant human SAA	610070	0.1	Recombinant	N/D
Recombinant human SAA	527-18	0.1, 1, 10	Recombinant	> 85% by SDS-PAGE
Native human SAA	LA449	1	Native	> 90% by SDS-PAGE

N/D = 没有验证

配对推荐

捕获抗体 \ 检测抗体	2201 / RC2201	2203	2205	2208	2209	2211	2212	2213
2201 / RC2201	–	+	+	–	–	+	–	–
2203	+	–	+	–	+	+	–	+
2205	–	–	–	–	–	+	+	–
2208	–	–	–	–	–	–	+	–
2209	–	+	–	–	–	+	–	–
2211	+	–	–	–	+	–	–	–
2212	–	–	+	+	–	–	–	–
2213	–	–	–	–	–	–	–	–

针对下述不同平台进行特定抗体对推荐:
FIA: 2205 (捕获) – 2212 (检测), 2208 – 2212
LF: 2201 (包被) – 2203 (标记), 2203 – 2201
IT: 2201 – 2211, 2201 – 2203, 2209 – 2211

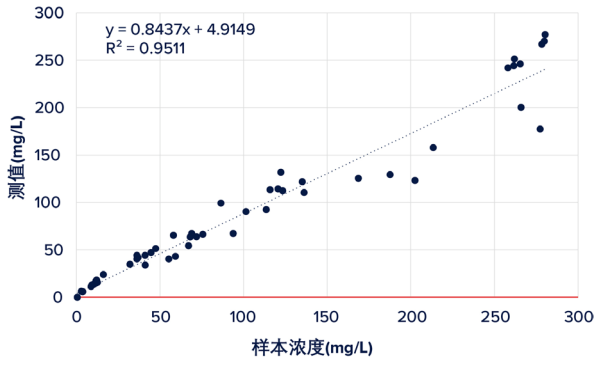
已经使用多重表面等离子体共振 (SPR) 技术和ELISA对SAA抗体进行了研究, 以确定用于SAA检测的抗体对。
敬请留意, 两个配对抗体的性能取决于测试时使用的方法和条件。

动力学参数

SAA 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
2201	2.4×10^{6}	3.4×10^{-5}	7.0×10^{10}	1.4×10^{-11} = 0.01 nM
RC2201	2.6×10^{6}	2.9×10^{-5}	8.8×10^{10}	1.1×10^{-11} = 0.01 nM
2203	2.7×10^{5}	5.7×10^{-5}	4.8×10^{9}	2.7×10^{-10} = 0.27 nM
2205	2.0×10^{6}	7.6×10^{-5}	2.6×10^{10}	5.0×10^{-11} = 0.05 nM
2208	1.4×10^{5}	6.7×10^{-5}	2.1×10^{9}	4.5×10^{-10} = 0.45 nM
2209	9.7×10^{5}	4.3×10^{-5}	2.3×10^{10}	1.2×10^{-10} = 0.12 nM
2211	4.9×10^{5}	2.5×10^{-5}	2.0×10^{10}	4.0×10^{-11} = 0.04 nM
2212	1.4×10^{5}	5.1×10^{-5}	2.8×10^{9}	3.0×10^{-10} = 0.30 nM
2213	8.7×10^{5}	1.9×10^{-5}	4.6×10^{10}	5.8×10^{-11} = 0.06 nM

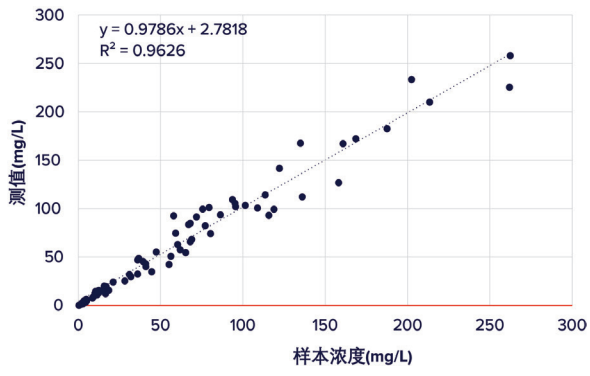
抗体-抗原结合反应的结合和解离特性可能对抗体在体外诊断应用中的可用性产生重大影响。

SAA 2201 和 2203
应用于免疫比浊平台



在乳胶增强的IT中用抗体对2201+2203检测临床样品。结果显示与参考方法 (Siemen) 具有良好的相关性。

SAA 2201 和 2203
应用于荧光层析平台



用荧光层析平台 (FLF) 上进行临床样本中SAA检测，抗体对2201 (包被) 和2203 (标记) 显示出优异的结果。

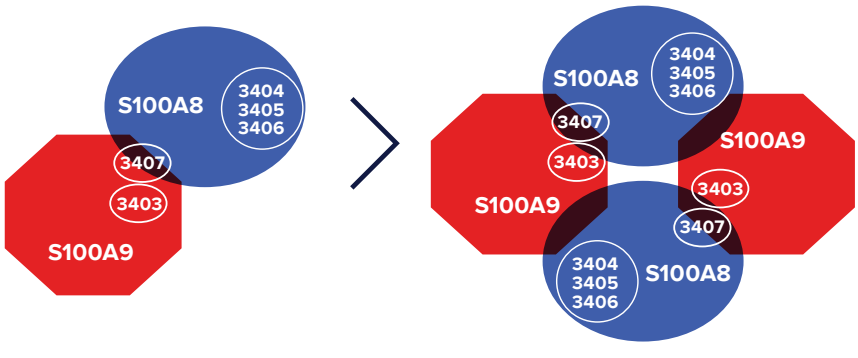
钙卫蛋白 (Calprotectin)

钙卫蛋白由两种蛋白S100A8和S100A9结合形成，是钙结合异质二聚体。分子量为24kD，每个亚基结合2个钙离子。在钙大量存在时，两个钙卫蛋白也可能结合在一起形成异质四聚体。[1] 钙卫蛋白在炎症部位由中性粒细胞分泌。它已经被证明在调节细胞因子合成过程中有重要作用，也通过必需的金属营养因子 (如锌和锰的螯合作用) 介导，而具有抗微生物活性。[2,3] 感染和发炎情况下，血浆和粪便中的钙卫蛋白水平明显升高。

体外诊断领域的应用

- 粪便钙卫蛋白已被用于检测肠道炎症 (结肠炎或肠炎)，并可作为炎症性肠病的生物标志物。[4-6]
- 检测血液 (血清和血浆) 中的钙卫蛋白可用于诊断多种炎症性疾病，包括关节炎等自身免疫性疾病及败血症等严重感染。[7,8]

结合位点



- 克隆3403能够识别S100A9亚基和S100A8/S100A9复合物。
- 克隆3404、3405和3406能够识别S100A8亚基和S100A8/SI00A9复合物。
- 克隆3407只能识别S100A8/S100A9复合物，不能够识别单个亚基。

抗人 Calprotectin 单克隆抗体

Calprotectin 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
3403	100460	5	36 months	IgG_{2a}	ELISA, LF
3404	100468	5	36 months	IgG_1	ELISA, LF
3405	100469	5	36 months	IgG_1	ELISA, LF
3406	100470	5	36 months	IgG_1	ELISA, LF
3407	100618	5	36 months	IgG_1	ELISA, LF

Calprotectin 抗原

Calprotectin 抗原	目录号	规格 (mg)	来源	纯度	相关抗体
S100A8 / S100A9, 100 µg	610061	100	Recombinant	N/D	3403, 3404, 3405, 3406, 3407
S100A8, 50 µg	710018	50	Recombinant	N/D	3404, 3405, 3406
S100A8, 500 µg	710035	500	Recombinant	N/D	3404, 3405, 3406
S100A8, 1000 µg	710034	1000	Recombinant	N/D	3404, 3405, 3406
S100A9, 50 µg	710019	50	Recombinant	N/D	3403
S100A9, 500 µg	710037	500	Recombinant	N/D	3403
S100A9, 1000 µg	710036	1000	Recombinant	N/D	3403

配对推荐

		检测抗体				
		3403	**3404**	**3405**	**3406**	**3407**
捕获抗体	**3403**	+	+	+	+	+
	3404	+	+	+	+	+
	3405	+	+	–	–	+
	3406	+	+	+	–	+
	3407	+	+	+	+	+

抗体3403可以自身配对，用于检测S100A9同源二聚体 (钙粒蛋白B)。

高敏抗体配对推荐：
3403子配对，作为捕获和检测抗体；
3404作为捕获抗体，3403、3405或3407作为检测抗体；
3406作为捕获抗体，3403、3405或3407作为检测抗体；
3407作为捕获抗体，3404、3405、3406或3407作为检测抗体。

动力学参数

Calprotectin 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
3403	1.9×10^{6}	9.1×10^{-4}	2.1×10^{9}	4.8×10^{-10} = 0.48 nM
3404	4.8×10^{5}	6.1×10^{-5}	7.8×10^{9}	1.3×10^{-10} = 0.13 nM
3405	7.4×10^{5}	1.5×10^{-4}	5.0×10^{9}	2.0×10^{-10} = 0.20 nM
3406	7.6×10^{5}	1.1×10^{-4}	6.9×10^{9}	1.4×10^{-10} = 0.14 nM
3407	4.0×10^{4}	5.0×10^{-5}	8.0×10^{8}	1.3×10^{-9} = 1.30 nM

降钙素原 (PCT)

降钙素原 (PCT) 是降钙素的前体，由甲状腺产生。是一个含116个氨基酸的蛋白，在细胞内被剪切形成3个肽：N端降钙素原、降钙素和抗钙素。在健康人中，只有降钙素被分泌到血液中，因此血清中PCT水平是很低的。但是在系统性感染病人，尤其是脓毒症的病人中，PCT不仅仅由甲状腺分泌，而是由几种类型的细胞分泌，且水平迅速升高。高水平的PCT也存在于患有心源性休克、全身性炎性反应综合征 (SIRS) 和外伤的病人中。[1-3]

Medix Biochemica有几株检测PCT的抗体，能够识别抗钙素和降钙素亚基。同时，Medix Biochemica也提供PCT抗原。

体外诊断领域的应用

疾病类型	研究方案设计	PCT 参考区间 (µg/L)	结论	参考文献
支气管炎	RCT	0.1-0.5	PCT减少了抗生素使用，在急诊科无不良后果 (ED)	4, 5
慢性阻塞性肺病	RCT	0.1-0.5		4, 5
肺炎	RCT	0.1-0.5 80-90% ↓		4-9
脓毒血症/休克	RCT	0.25-0.5 80-90% ↓	PCT减少抗生素使用，在重症监护室 (ICU) 无不良后果	10, 11

RCT=随机对照试验
PCT与其他血清标志物 (如TRAIL、IP-10、CRP、SAA和IL-6) 联合使用可以帮助区分病毒和细菌感染。[12-15]

抗人 PCT 单克隆抗体

PCT 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
4003	100562	5	N/D	IgG_1	ELISA, LF, CLIA
4004	100563	5	36 months	IgG_1	ELISA, LF, CLIA
4005	100564	5	36 months	IgG_1	ELISA, LF, CLIA
4006	100567	5	N/D	IgG_1	ELISA, LF, CLIA
4008	100769	5	N/D	IgG_3	ELISA, LF, CLIA
Procalcitonin (PCT-N terminal)	HM078	Lot dependent	≤ 2 weeks & LT -20°C	IgG_1	LF
Procalcitonin (PCT katacalcin)	HM220	Lot dependent	≤ 2 weeks & LT -20°C	IgG_1	LF

N/D =没有验证
LT =长期保存

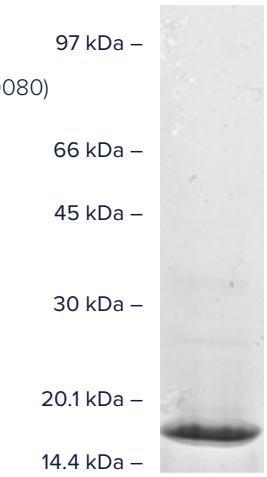
抗人 Calcitonin 单克隆抗体

Calcitonin 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
4050	700019	> 1	60 months	IgG_1	ELISA
4051	700020	> 1	60 months	IgG_1	ELISA

PCT 抗原

PCT 抗原	目录号	规格 (mg)	纯度
Recombinant human procalcitonin protein with a C-terminal histidine tag	610080	0.1	N/D
Procalcitonin (PCT) antigen, recombinant	LA368	1	>95% SDS-PAGE
Procalcitonin (PCT) antigen, recombinant	496-70	0.1, 1, 10 or 100	>90% SDS-PAGE

纯度



重组人PCT蛋白(610080) SDS-PAGE分析。

配对推荐

捕获抗体 \ 检测抗体	4003	4004	4005	4006	4008	HM220
4003	–	+	+	–	–	
4004	+	–	–	+	+	
4005	+	–	–	+	+	
4006	–	+	+	–	–	
4008	–	+	+	–	–	
HM078						+

未标注结果的配对未做相关验证。

捕获抗体 \ 检测抗体	4004	4005	4050	4051
4004	–	–	+	–
4005	–	–	+	–
4050	+	+	–	+
4051	–	–	+	–

4004和4005识别表位为降钙素原区域Met (67) -Arg (95) 上的降钙素结构域。

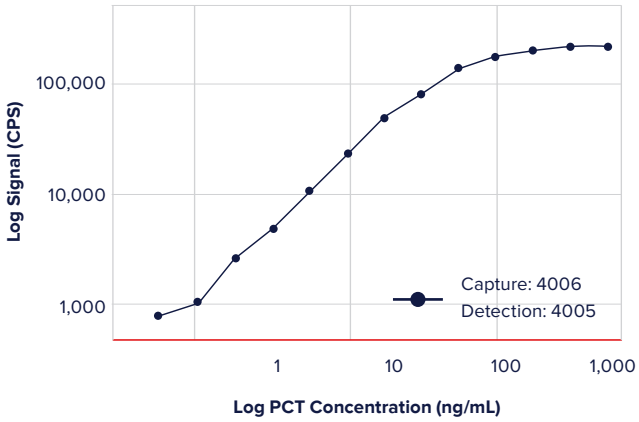
PCT 抗体结合位点

N-terminal	Calcitonin		Katacalcin	
HM078	4004		4003	4006
	4005		4008	
	4050	4051		HM220

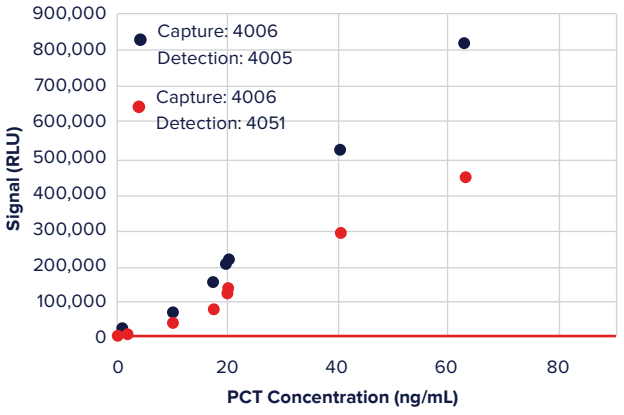
动力学参数

PCT 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
4003	1.4×10^5	1.7×10^{-4}	8.0×10^8	1.5×10^{-9} = 1.52 nM
4004	5.1×10^5	Does not dissociate		
4005	3.2×10^5	Does not dissociate		
4006	3.1×10^5	2.9×10^{-5}	1.1×10^{10}	8.6×10^{-11} = 0.09 nM
4008	1.2×10^6	1.8×10^{-4}	6.5×10^9	3.3×10^{10} = 0.33 nM
4051	3.5×10^5	9.1×10^{-5}	3.8×10^9	2.5×10^{-10} = 0.25 nM

PCT 标准曲线

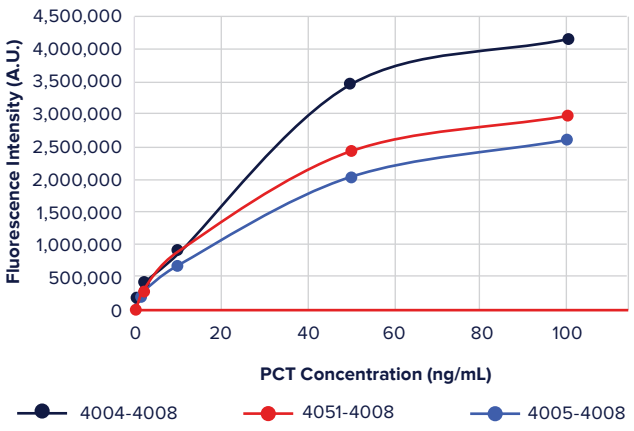


PCT 4005, 4006 和 4051
应用于化学发光平台



Medix Biochemica PCT抗体对进行PCT检测, 在CLIA测定中显示出优异的性能。

PCT 4004, 4005, 4008 和 4051
应用于荧光层析平台



Medix Biochemica的三对抗体在荧光层析 (FLF) 中表现出优异的性能。

肝素结合蛋白 (HBP)

HBP, 也被称为天青杀素或37 kDa的阳离子抗菌蛋白(CAP37), 在成熟的中性粒细胞中形成, 并被快速分泌出来。在免疫系统受到攻击, 例如细菌或病毒感染时, 中性粒细胞是第一个产生反应的免疫细胞。

活化的中性粒细胞释放HBP, HBP作为单核细胞和巨噬细胞的诱导剂, 可导致血管渗漏和水肿形成, 并对多种白细胞和上皮细胞具有促炎作用。

Medix Biochemica能够提供6株单克隆抗体和2种抗原。

体外诊断领域的应用

血清 / 血浆

- HBP用于诊断和预测危重患者败血症的病程进展 [1-4]

脑脊液

- 检测HBP水平可诊断脑膜炎和脑室炎 [5]

支气管肺泡灌洗液

- HBP可作为肺炎的标志物 [6]

痰液

- HBP被用作囊性纤维化肺部炎症的标志物 [7]

抗人 HBP 单克隆抗体

HBP 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
12201	100969	5	N/D	IgG_1	ELISA
Azide free clone B-K37	855.440.005	1	12 months	IgG_1	ELISA
Azide free clone B-R37	855.500.005	1	N/D	IgG_1	ELISA
Azide free clone B-P37	855.510.005	1	N/D	IgG_{2b}	ELISA
Heparin binding protein antibody	HM721	Lot dependent	N/D	IgG_{2b}	LF, ELISA, CLIA
Heparin binding protein antibody	HM722	Lot dependent	N/D	IgG_1	LF, ELISA, CLIA

N/D = 没有验证

抗体可分为两个表位组。组内的抗体识别相同表位或识别的表位有重叠部分。
第1组：12201、B-P37、B-R37、HM721
第2组：B-K37、HM722

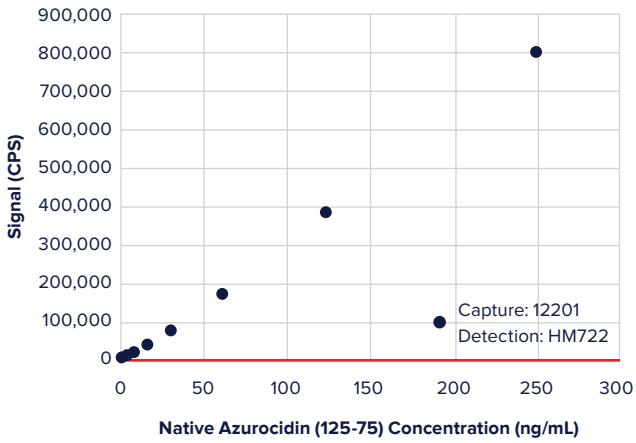
HBP 抗原

HBP 抗原	目录号	规格 (mg)	纯度	相关抗体
Heparin binding protein (HBP) antigen, recombinant	LA537	0.1, 1	>95% by SDS-PAGE	B-K37, B-R37, B-P37, HM721, HM722
Native azurocidin	125-75	1	>95% by SDS-PAGE	12201, B-K37,B-R37, B-P37, HM722

配对推荐

捕获抗体 \ 检测抗体	12201	B-K37	B-P37	B-R37	HM721	HM722
12201	–	+	–	–	–	+
B-K37	+	–	+	+	+	–
B-P37	–	+	–	–	–	+
B-R37	–	+	–	–	–	+
HM721	–	+	–	–	–	+
HM722	+	–	+	+	+	–

HBP 12201 和 HM722
应用于免疫荧光夹心平台



动力学参数

HBP 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
12201	7.2×10^{5}	1.5×10^{-4}	4.7×10^{9}	2.6×10^{-10} = 0.26 nM
B-R37	4.8×10^{5}	1.5×10^{-4}	3.1×10^{9}	8.1×10^{-10} = 0.81 nM
B-P37	6.8×10^{5}	1.1×10^{-4}	6.0×10^{9}	2.1×10^{-10} = 0.21 nM
B-K37	1.9×10^{5}	Does not dissociate		
HM721	6.8×10^{5}	1.4×10^{-4}	4.9×10^{9}	2.6×10^{-10} = 0.26 nM
HM722	3.0×10^{5}	7.1×10^{-5}	4.2×10^{9}	3.0×10^{-10} = 0.30 nM

白细胞介素-6 (IL-6)

白细胞介素6 (IL-6) 既是一种促炎细胞因子，又是一种抗炎肌细胞因子。IL-6是发烧和急性期反应的重要介质。

IL-6负责刺激急性期蛋白质合成，以及骨髓中中性粒细胞的产生。它支持B细胞的生长，并对调节性T细胞具有拮抗作用。Medix Biochemica提供多株IL-6单克隆抗体。

体外诊断领域的应用

- 第一种与IL-6显著升高相关的疾病是心脏粘液瘤，这是一种良性心脏肿瘤，IL-6水平升高会引起广泛的炎症症状。[1,2]
- IL-6与类风湿性关节炎和其他自身免疫性疾病的发病机制相关。[3]
- 持续和过量的IL-6产生可能发生在各种炎症性疾病中。[3-7]
- 超级炎症综合征大多由病毒感染引发，其特征是大量的细胞因子水平 (包括IL-6) 产生，其升高水平往往会导致死亡，并伴随多器官的衰竭。[8,9]
- IL-6是细胞因子风暴的重要指标，其已被发现可对血管稳态和细胞炎症等几个方面进行调节。[10]

抗人 IL-6 单克隆抗体

IL-6 抗体	目录号
2703	100328
2704	100329
2706	100330
2707	100798

IL-6 抗体	目录号
Monoclonal, azide free clone B-E8	855.050.005
Monoclonal, PE conjugated clone B-E8	855.052.019
Capture, azide free clone B-E8	879.030.001
Monoclonal, azide free clone B-F6	855.060.005
Monoclonal, azide free clone B-E4	855.730.005
Detection, biotin conjugated clone B-E4	879.030.002

IL-6 抗体	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
2703	5	24 months	IgG_1	LF, ELISA
2704	5	18 months	IgG_{2b}	LF, ELISA
2406	5	36 months	IgG_{2a}	LF, ELISA
2707	5	24 months	IgG_1	LF, ELISA
B-E8	1	12 months	IgG_1	ELISA, ELISpot, Functional assay, FC
B-F6	1	12 months	IgG_1	WB, IHC, FC
B-E4	1	12 months	IgG_1	ELISA, ELISpot

IL-6 抗原

IL-6 抗原	目录号	规格 (mg)	来源	纯度
Recombinant IL-6, 50 µg	710015	50 µg	Recombinant	>90% by SDS-PAGE
Recombinant IL-6, 500 µg	710038	500 µg	Recombinant	>90% by SDS-PAGE
Recombinant IL-6, 1000 µg	710039	1000 µg	Recombinant	>90% by SDS-PAGE
Interleukin-6 (IL-6) antigen	341-36	0.1, 1 and 10 mg	Recombinant	>90% by SDS-PAGE
Recombinant human interleukin-6 (IL-6)-BSA	715-H01-010-BSA	10 µg	Recombinant	>95% by SDS-PAGE
Recombinant human interleukin-6 (IL-6)-BSA	715-H01-025-BSA	25 µg	Recombinant	>95% by SDS-PAGE
Recombinant human interleukin-6 (IL-6)-CF	715-H01-010-CF	10 µg	Recombinant	>95% by SDS-PAGE
Recombinant human interleukin-6 (IL-6)-CF	715-H01-025-CF	25 µg	Recombinant	>95% by SDS-PAGE

N/D = 没有验证

配对推荐

捕获抗体 \ 检测抗体	2703	2704	2706	2707	B-E4	B-F6	B-E8
2703	–	+	–	+	+	+	+
2704	+	–	+	+	+	+	+
2706	–	–	–	+	+	–	–
2707	+	+	+	–	+	+	+
B-E4	–	+	–	+	–	–	+
B-F6	–	–	–	–	+	–	–
B-E8	–	+	–	+	+	–	–

在免疫荧光夹心平台上，最佳配对是2704作为捕获抗体，B-E8或B-E4作为检测抗体。
其次的配对是2707作为捕获抗体，B-E8和B-E4作为检测抗体。

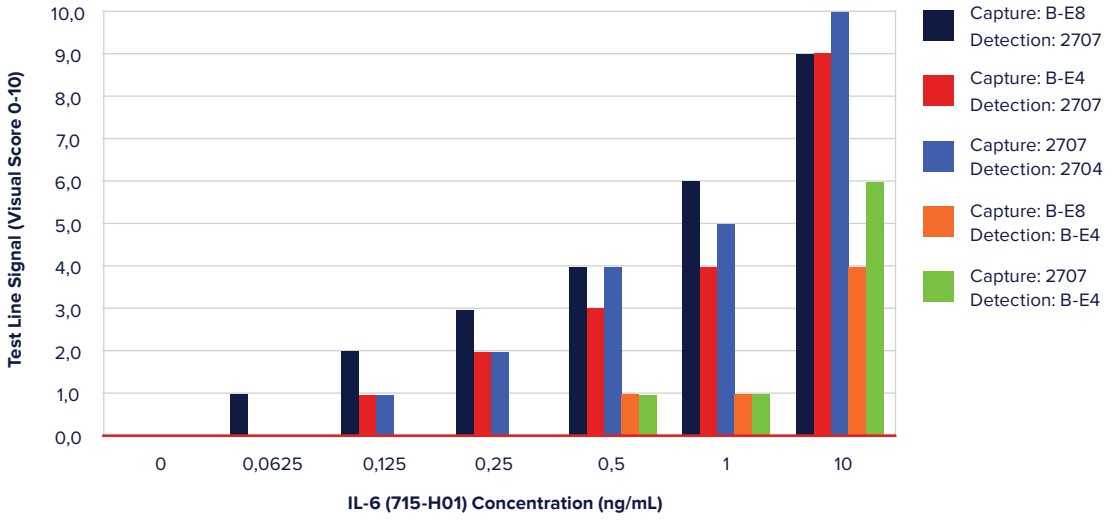
在层析平台的最佳配对将是2704、2707、B-E8或B-E4作为捕获抗体，2704或2707作为检测抗体。

动力学参数

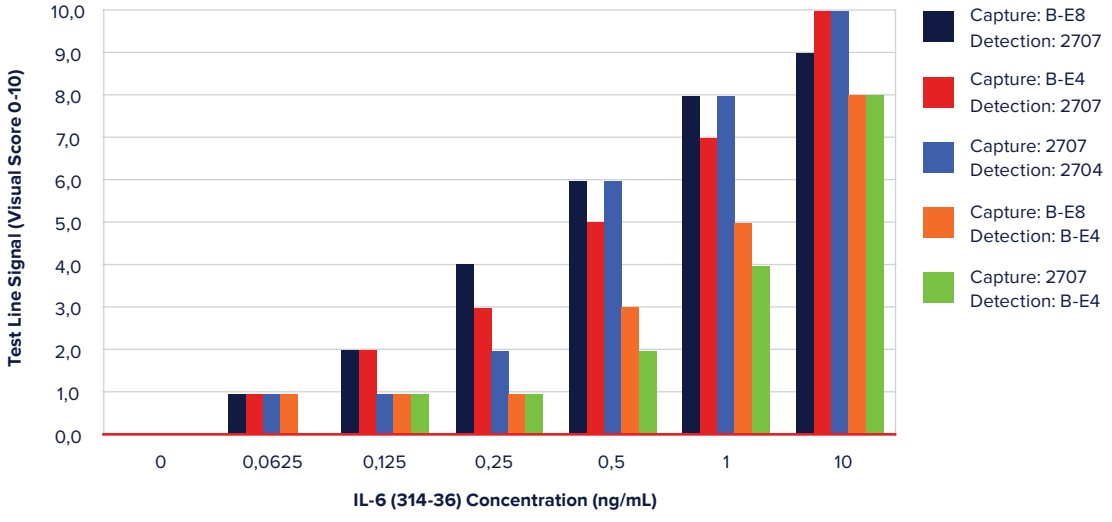
IL-6 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
2703	6.1×10^{6}	4.8×10^{-5}	1.3×10^{11}	7.7×10^{-11} = 0.08 nM
2704	1.8×10^{6}	Does not dissociate		
2706	5.2×10^{6}	Does not dissociate		
2707	6.9×10^{6}	7.0×10^{-5}	9.8×10^{10}	4.8×10^{-11} = 0.05 nM

抗体-抗原结合反应的结合和解离特性会对抗体在体外诊断应用中的可用性产生重大影响。

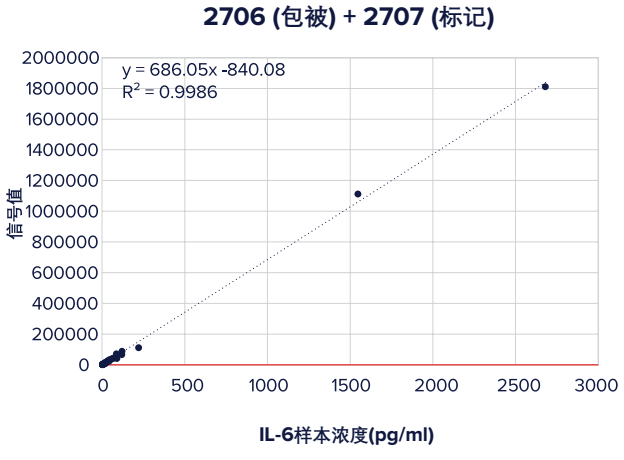
在层析平台上，使用 IL-6 抗原 (715-H01) 进行灵敏度检测

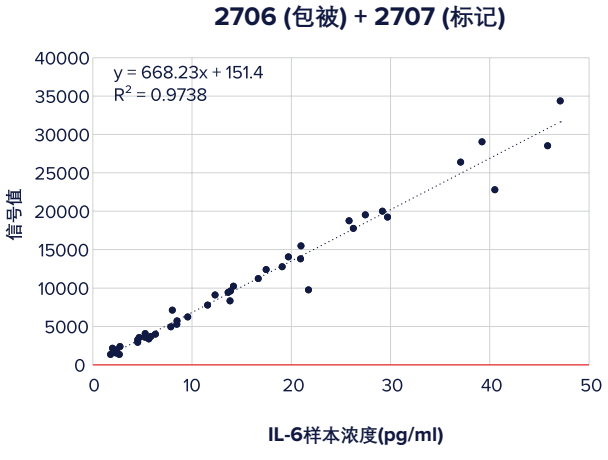


在层析平台上，使用 IL-6 抗原 (314-36) 进行灵敏度检测



在化学发光平台，使用 IL-6 单克隆抗体进行临床相关性检测





白细胞介素-8 (IL-8)

白细胞介素8 (IL-8), 也称为趋化因子配体8 (CXCL8), 是一种由巨噬细胞和其他类型细胞 (如上皮细胞、气道平滑肌细胞和内皮细胞) 产生的趋化因子。IL-8具有两个主要功能: 首先, 它诱导靶细胞的趋化性, 主要是中性粒细胞, 也包括其他粒细胞, 使它们向感染部位迁移; 其次, 一旦IL-8与受体结合, 它就会刺激吞噬作用。众所周知, IL-8也是促进新血管形成的潜在启动子。

体外诊断领域的应用

对IL-8水平进行分析, 以了解免疫、感染或炎症疾病的病理生理学。

- IL-8作为结肠癌细胞系的生长因子发挥作用。[4] 通过诱导跨膜转运蛋白的表达，它似乎是恶性胸膜间皮瘤化疗耐药性的重要因素。[5]
- IL-8是与炎症相关的关键介质。它被认为是牙龈[2] 和银屑病[8] 的促炎介质，并被证明与肥胖有关。[3]
- IL-8也与囊性纤维化的病理学有关。[7]

抗人 IL-8 单克隆抗体

IL-8 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
1501	100218	5	36 months	IgG_1	ELISA
Azide free clone B-K8	855.080.005	1	12 months	IgG_1	ELISA, Functional assay, FC
Azide free clone B-B49	857.170.005	1	12 months	IgG_1	ELISA

配对推荐

		检测抗体
		B-K8
捕获抗体	**B-B49**	+

动力学参数

IL-8 抗体	亲和常数 K_A (1/M)	解离常数 K_D (M)
1501	2.0×10^8	$5.0 \times 10^{-9} = 5.0$ nM

中性粒细胞明胶酶相关脂质运载蛋白 (NGAL)

中性粒细胞明胶酶相关脂质运载蛋白 (NGAL) 是一种小的糖蛋白，属于载脂蛋白超家族。伴随着抗菌防卫NGAL在上皮组织、远端小管表达，收集到肾管。NGAL通过螯合铁、并防止细菌利用铁来参与先天免疫，从而限制细菌的生长。[1-3] 在急性肾损伤 (AKI) 的情况下，NGAL浓度会在损伤后的两小时内达到较高水平，并分泌到血液和尿液中。

Medix Biochemica提供NGAL单克隆抗体和多克隆抗体，以及天然和重组抗原，用于NGAL检测。

体外诊断领域的应用

- NGAL可作为AKI的生物标志物。AKI患者的NGAL水平与其预后的严重程度有关。[4,5,7,8]
- NGAL也可作为慢性肾脏疾病、造影剂诱导肾病的早期诊断和肾移植衡量的标志物。[6,9]
- 炎症性肠病 (IBD) 患者的血清或粪便中的NGAL水平明显高于健康对照组。结肠发生炎症时，血清NGAL水平更高。[10]
- NGAL与其他炎症标志物联合使用有助于区分病毒和细菌感染。[12-14]

抗人 NGAL 单克隆抗体

NGAL 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
4202	100579	5	36 months	IgG_1	ELISA, IT
4203	100580	5	36 months	IgG_1	ELISA, IT
4204	100581	5	36 months	IgG_1	ELISA, IT
4205	100582	5	36 months	IgG_1	ELISA, IT

抗人 NGAL 多克隆抗体

NGAL 多克隆抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	来源
NGAL polyclonal antibody	GNGAL-80A-Z	Lot dependent	12 months	Goat

NGAL 抗原

NGAL 抗原	目录号	规格 (mg)	来源	纯度
Recombinant NGAL antigen	610012	0.1	Recombinant	N/D
Neutrophil gelatinase-associated lipocalin (NGAL) antigen	LA312	1.0	Recombinant	>98% SDS-PAGE
Recombinant NGAL antigen	342-49R	0.1, 1.0	Recombinant	>96% SDS-PAGE
Neutrophil gelatinase-associated lipocalin (NGAL), human	342-49	0.1, 1.0	Native	>90% SDS-PAGE

N/D = 没有验证

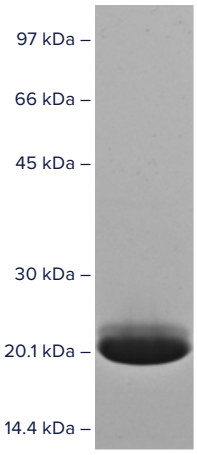
配对推荐

捕获抗体 \ 检测抗体	4202	4203	4204	4205
4202	–	+	+	+
4203	+	–	+	+
4204	+	+	–	+
4205	+	+	+	–

纯度

重组人NGAL蛋白 (610012) SDS-PAGE分析。

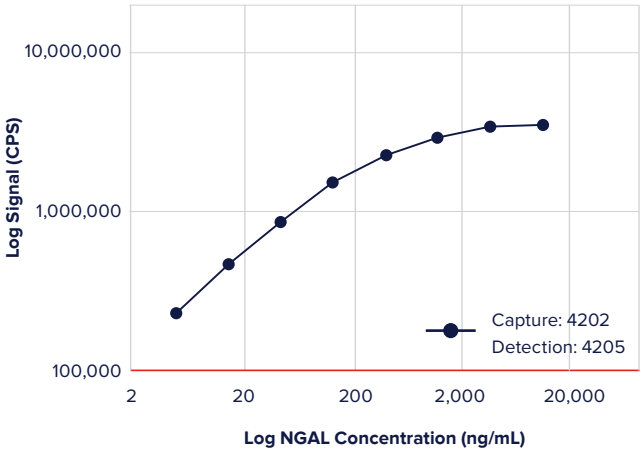
该蛋白由大肠杆菌进行表达产生，氨基酸序列为21-198 (根据UniProt#P80188)，C末端有组氨酸标签。

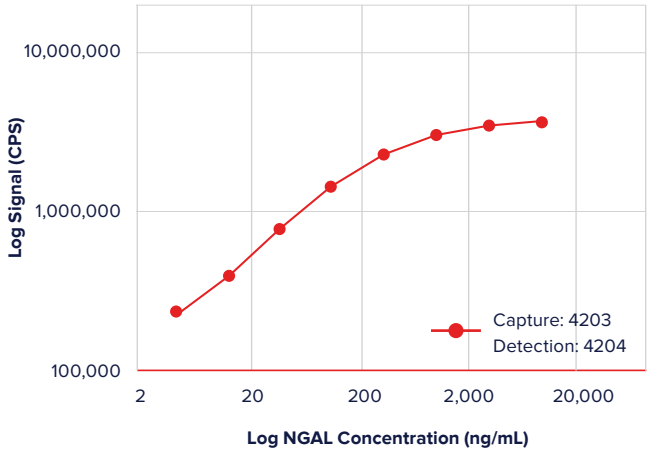


动力学参数

NGAL 抗体	结合速率常数 k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
4202	6.4×10^5	4.0×10^{-4}	1.6×10^9	6.3×10^{-10} = 0.63 nM
4203	2.2×10^5	Does not dissociate under conditions used		
4204	1.8×10^5	3.4×10^{-5}	5.3×10^9	1.8×10^{-10} = 0.18 nM
4205	5.6×10^4	4.9×10^{-5}	1.2×10^5	8.6×10^{-10} = 0.86 nM

NGAL 标准曲线


10,000,000
1,000,000
100,000
Log Signal (CPS)
2
20
200
2,000
20,000
Log NGAL Concentration (ng/mL)
Capture: 4202
Detection: 4205


10,000,000
1,000,000
100,000
Log Signal (CPS)
2
20
200
2,000
20,000
Log NGAL Concentration (ng/mL)
Capture: 4203
Detection: 4204

前白蛋白 (Prealbumin)

前白蛋白，也称为转甲状腺素，主要由肝脏合成。前白蛋白可以协助将甲状腺激素和维生素A通过血流进行转运。

体外诊断领域的应用

当前白蛋白水平低于正常水平，可能发生以下疾病：

- 营养不良
- 炎症
- 创伤，如烧伤
- 严重或长期进展的疾病，如癌症
- 肝病
- 严重感染
- 甲状腺功能亢进
- 某些消化系统疾病

当前白蛋白水平高于正常水平，可能发生以下情况：

- 怀孕
- 霍奇金病
- 肾功能衰竭
- 酒精滥用
- 缺铁
- 肾上腺功能亢进
- 类固醇药物

前白蛋白测试不用于诊断或监测这些情况。如果患者的前白蛋白水平升高或降低，医生需要进行其他测试来诊断具体情况。

Medix Biochemica提供5种前白蛋白单克隆抗体和2种多克隆抗体。

抗人 Prealbumin 单克隆抗体

Prealbumin 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
11601	100828	5	N/D	IgG_1	IT, ELISA
11603	100830	5	N/D	IgG_1	IT, ELISA
11604	100831	5	N/D	IgG_1	IT, ELISA
11605	100832	5	N/D	IgG_1	IT, ELISA
11606	100833	5	N/D	IgG_1	IT, ELISA

抗人 Prealbumin 多克隆抗体

Prealbumin 多克隆抗体	目录号	浓度 (mg/ml)	有效期 (2–8°C)	来源
Polyclonal antibody	JP144	Lot dependent	< 2 weeks, LT -20°C	Goat
Prealbumin (transthyretin, TTR) anti-human polyclonal antibody	GPRE-80A	Lot dependent	24 months	Goat

LT = 长期保存

Prealbumin 抗原

Prealbumin 抗原	目录号	规格 (mg)	来源	纯度
Prealbumin/transthyretin, human serum	496-10	1, 10 or 100	Human	>70% SDS-PAGE
Prealbumin/transthyretin, human plasma	496-11	0.1, 1, 10 or 100	Human	>96% SDS-PAGE

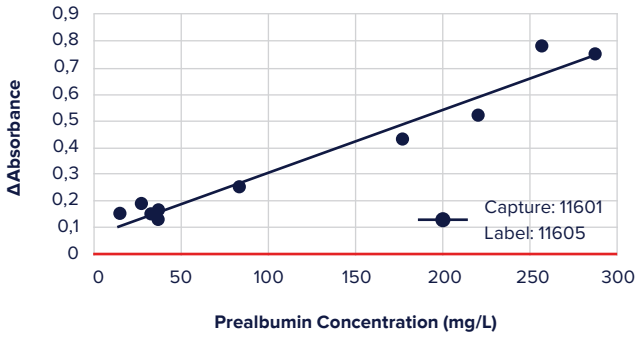
配对推荐

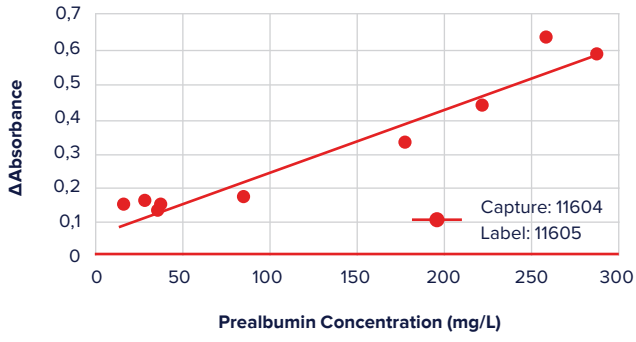
捕获抗体 \ 检测抗体	11601	11603	11604	11605	11606
11601	+	+	+	+	+
11603	+	+	+	+	+
11604	+	+	+	+	+
11605	+	+	+	+	+
11606	+	+	+	+	+

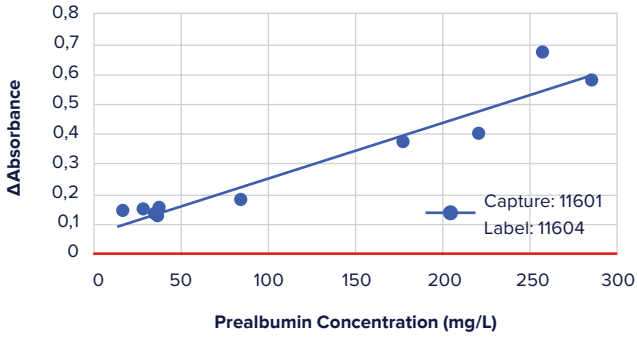
动力学参数

Prealbumin 抗体	结合速率常数k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
11601	3.2×10^{5}	9.4×10^{-6}	3.4×10^{10}	2.8×10^{-11} = 0.03 nM
11603	5.1×10^{5}	1.7×10^{-5}	3.1×10^{10}	3.2×10^{-11} = 0.03 nM
11604	2.2×10^{5}	1.3×10^{-5}	1.8×10^{10}	4.8×10^{-11} = 0.05 nM
11605	3.8×10^{5}	8.1×10^{-6}	4.7×10^{10}	2.1×10^{-11} = 0.02 nM
11606	5.2×10^{5}	4.4×10^{-5}	1.2×10^{10}	8.3×10^{-11} = 0.08 nM

在免疫比浊平台上前白蛋白检测







在免疫比浊平台上，用Medix Biochemica抗体检测临床样品中的前白蛋白，显示出良好的线性和动态范围。

转铁蛋白 (Transferrin)

转铁蛋白是一种糖蛋白，与铁结合并介导铁 (Fe) 的转运。转铁蛋白在肝脏中产生，并含有两种Fe3+离子的结合位点。肝脏是转铁蛋白合成的主要部位，但其他组织和器官也可以产生转铁蛋白。当发生某些情况 (例如缺铁性贫血或妊娠期间) 时，血浆转铁蛋白水平通常会升高。另一方面，在铁过载的情况下，例如蛋白质营养不良，血浆转铁蛋白水平会降低。

体外诊断领域的应用

- 转铁蛋白水平降低导致的慢性铁过载可见于营养不良、酗酒、肾小球肾炎、血色素沉着和炎症过程。
- 铁水平低而转铁蛋白水平高 (高铁血症) 是缺铁的迹象，可能由妊娠、药物 (口服避孕药、雌激素) 或缺铁性贫血引起。

Medix Biochemica提供用于转铁蛋白检测的单克隆和多克隆抗体。

抗人 Transferrin 单克隆抗体

Transferrin 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
3104	100525	5	N/D	IgG_1	ELISA
3105	100440	5	36 months	IgG_1	ELISA
3106	100474	5	36 months	IgG_1	ELISA
Transferrin antibody	HM063	Lot dependent	≤ 2 weeks, LT -20°C	IgG_1	LF
Transferrin antibody	HM065	Lot dependent	≤ 2 weeks, LT -20°C	IgG_1	LF

抗人 Transferrin 多克隆抗体

Transferrin 多克隆抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	来源	应用
Transferrin antibody	JP148	Lot dependent	N/D	Goat	IT
Transferrin antibody	JP202	Lot dependent	N/D	Goat	IT

N/D = 没有验证

Transferrin 抗原

Transferrin 抗原	目录号	规格 (mg)	来源	纯度
Recombinant human transferrin	535-70R	1, 10 or 100	Recombinant	>95% by SDS-PAGE
Transferrin antigen	LA181	0.1, 1, 10 or 100	Native	>95% by SDS-PAGE

配对推荐

		检测抗体			
		3104	**3105**	**3106**	**HM065**
捕获抗体	**3104**	–	+	+	
	3105	+	–	+	
	3106	+	+	–	
	HM063				+

未标注结果的配对未做相关验证。

动力学参数

Transferrin 抗体	结合速率常数k_{on} (1/Ms)	解离速率常数 k_{off} (1/s)	亲和常数 K_A (1/M)	解离常数 K_D (M)
3104	0.6×10^{6}	1.7×10^{-4}	3.8×10^{9}	2.6×10^{-10} = 0.26 nM
3105	6.7×10^{6}	1.3×10^{-5}	5.3×10^{11}	1.9×10^{-12} = 0.002 nM
3106	2.2×10^{6}	1.1×10^{-4}	12.1×10^{10}	4.8×10^{-11} = 0.048 nM

胰蛋白酶原-2 (Trypsinogen-2)

胰蛋白酶原是胰蛋白酶的前体形式，在人体中可分为三种主要的同工酶：胰蛋白酶原-1 (阳离子胰蛋白酶原形式)、胰蛋白酶原-2 (阴离子胰蛋白酶原类型) 和胰蛋白酶原-3 (meso-胰蛋白酶原)。胰蛋白酶原-2被位于肠细胞刷状边界膜上的肠激酶 (EK) 激活。活化的胰蛋白酶原-2产生胰蛋白酶，是一种催化蛋白质水解形成较小多肽的胰腺酶。

Medix Biochemica提供两种单克隆抗体。

体外诊断领域的应用

血清 / 血浆

- 急性胰腺炎 (AP) 患者的血清诊断和预后评估。[1]

尿液

- AP患者的尿胰蛋白酶原-2水平明显升高，并持续升高数天甚至数周。[2]
- 胰蛋白酶原-2水平升高，也发生在以下情况：胰腺酶产生异常、囊性纤维化和胰腺癌症患者。
- 在某些情况下，胰蛋白酶原-2测试用于筛查新生儿囊性纤维化。

抗人 Trypsinogen-2 单克隆抗体

Trypsinogen-2 抗体	目录号	浓度 (mg/mL)	有效期 (2–8°C)	亚型	应用
8603	100107	5	24 months	IgG_{2b}	ELISA
8607	100108	5	12 months	IgG_{1}	ELISA

配对推荐

		检测抗体	
		8603	**8607**
捕获抗体	**8603**	–	+
	8607	+	–

动力学参数

Trypsinogen-2 抗体	亲和常数 K_A (1/M)
8603	1.4×10^8
8607	1.6×10^8

抗体、抗原和生物样本

产品	目录号
Alpha-1-Antitrypsin (AAT)	
AAT antibody	
Anti-h AAT 1002 SPTN-5	100209
Anti-h AAT 1003 SPTN-5	100210
AAT antigen	
Alpha-1-Antitrypsin (A1AT), human plasma	106-11-1
CD25	
CD25 antibody	
Anti-human CD25 monoclonal antibody, azide free clone B-B10	852.000.005
Anti-human CD25 monoclonal antibody, azide free clone B-F2	852.010.005
Anti-human CD25 monoclonal antibody, azide free clone B-G3	852.020.005
Antigen	
Recombinant human CD25 - IL-2RA (CHO) 100µg	705-H27-100
CD126	
CD126 antibody	
Anti-human CD126 monoclonal antibody, azide free clone B-R6	852.030.005
Anti-human CD126 monoclonal antibody, azide free clone B-F19	852.040.005
Anti-human CD126 monoclonal antibody, azide free clone B-N12	852.050.005
Ceruloplasmin	
Ceruloplasmin polyclonal antibodies	
Polyclonal anti-human ceruloplasmin antibody	GC-80A
Polyclonal antibody, IgG fraction -10 ml	JP088
Ceruloplasmin antigen	
Ceruloplasmin (CER), human plasma	187-51
Ceruloplasmin antigen, native	LA165
Complement Component 3 (C3)	
C3 polyclonal antibody	
Complement component 3 (C3) antibody -10 ml	JP127
Complement component 3 (C3), goat polyclonal antibody – 1mg	GC3-80A-1
Complement component 3 (C3), goat polyclonal antibody -10 mg	GC3-80A-10
C3 antigen	
Complement C3c (C3c), human plasma, 0.1 mg	194-31-0.1
Complement C3c (C3c), human plasma, 1 mg	194-31-1
Complement C3c (C3c), human plasma, 10 mg	194-31-10
Complement C3c (C3c), human plasma, 100 mg	194-31-100
Complement C3c (C3c), human plasma, 1 mg	194-32-1
Complement C3c (C3c), human plasma, 10 mg	194-32-10
Complement C3c (C3c), human plasma, 100 mg	194-32-100

产品	目录号
Complement Component 4 (C4)	
C4 polyclonal antibody	
Complement component 3 (C3) antibody -10 ml	JP128
C4 polyclonal goat anti-human affinity purified antibody -0.1 mg	GC4-80A-0.1
C4 polyclonal goat anti-human affinity purified antibody - 1 mg	GC4-80A-1
C4polyclonal goat anti-human affinity purified antibody - 10 mg	GC4-80A-10
C4 antigen	
Complement component 4c (C4c), human plasma, 0.1mg	194-41-0.1
Complement component 4c (C4c), human plasma, 1 mg	194-41-1
Complement component 4c (C4c), human plasma, 10 mg	194-41-10
Complement component 4c (C4c), human plasma, 100 mg	194-41-100
Human plasma complement component 4 (C4c), 1 mg	194-42-1
Human plasma complement component 4 (C4c), 10 mg	194-42-10
Human plasma complement component 4 (C4c), 100 mg	194-42-100
Elastase	
Elastase antibody	
Pancreatic elastase antibody	HM1033
Pancreatic elastase antibody	HM1034
Elastase polyclonal antibody	
Elastase antibody	JP137
Elastase antibody	JP138
Elastase, polyclonal antibody, anti-human IgG fraction whole antiserum	SEST-80G
Elastase antigen	
Elastase CELA3A antigen, recombinant	LA480
Elastase CELA3B antigen, recombinant	LA481
Interleukin-1B (IL-1B)	
Interleukin-1β antibody	
Anti-human IL-1b monoclonal antibody, azide free clone B-A15	855.010.005
Anti-human IL-1b monoclonal antibody, azide free clone B-B53	857.260.005
Interleukin 4 (IL-4)	
IL-4 antibody	
Anti-human IL-4 monoclonal antibody, azide free clone B-R14	853.800.005
Anti-human IL-4 monoclonal antibody, azide free clone B-S4	855.030.005
Anti-human IL-4 monoclonal antibody, azide free clone B-G28	855.170.005

抗体、抗原和生物样本

产品	目录号
Interleukin 10 (IL-10)	
IL-10 antibody	
Anti-human IL-10 monoclonal antibody, azide free clone B-T10	853.870.005
Anti-human IL-10 monoclonal antibody, azide free clone B-S10	855.100.005
Interleukin 12 (IL-12)	
IL-12 antibody	
Anti-human IL-12 p35 monoclonal antibody, azide free clone B-T21	855.120.005
Anti-human IL-12 p40 monoclonal antibody, azide free clone B-P24	855.130.005
Anti-human IL-12 p40 monoclonal antibody, azide free clone B-P40	855.180.005
Interleukin 13 (IL-13)	
IL-13 antibody	
Anti-human IL-13 monoclonal antibody, azide free clone B-P6	853.750.005
Anti-human IL-13 monoclonal antibody, azide free clone B-B13	855.140.005
Interleukin-17 (IL-17)	
IL-17A antibody	
Anti-human IL-17A monoclonal antibody, azide free clone B-B51	853.910.005
Anti-human IL-17A monoclonal antibody, FITC conjugated clone B-A50	853.941.019
Anti-human IL-17A monoclonal antibody, PE conjugated clone B-A50	853.942.019
Anti-human IL-17A monoclonal antibody, unconjugated clone B-A50	853.943.020
Anti-human IL-17A monoclonal antibody, azide free clone B-C49	853.950.005
IL-17B antibody	
Anti-human IL-17B monoclonal antibody, azide free clone B-B57	857.240.005
Anti-human IL-17B monoclonal antibody, azide free clone B-B58	857.250.005
IL-17C antibody	
Anti-human IL-17C monoclonal antibody, azide free clone B-A60	857.670.005
Anti-human IL-17C monoclonal antibody, azide free clone B-Z17	857.710.005
IL-17F antibody	
Anti-human IL-17F monoclonal antibody, azide free clone B-G46	853.990.005
Anti-human IL-17F monoclonal antibody, azide free clone B-C52	855.560.005
Anti-human IL-17F detection antibody, biotin conjugated clone B-F60	879.980.002

产品	目录号
Kappa Light Chain	
Kappa light chain polyclonal antibody	
KAPPA B+F, polyclonal anti-human KAPPA light chain affinity purified	GKBF-80A
Human kappa light chain antibody-AP	JP095
Human kappa light chain antibody	JP140
Kappa light chain antigen	
Kappa free light chain antigen from human urine	410-12
Lactoferrin (LF)	
Lactoferrin antibody	
Lactoferrin antibody	HM810
Lactoferrin antibody	HM811
Lactoferrin polyclonal antibody	
Lactoferrin, goat polyclonal anti-human antibody	GLAC-80A
Lactoferrin antigen	
Recombinant lactoferrin, 50 µg	710016
Recombinant lactoferrin, 500 µg	710041
Recombinant lactoferrin, 1000 µg	710040
Lactoferrin, apo – human milk	390-11
Lactoferrin, (Lf) – bovine Milk	390-40
Apo-lactoferrin, (Lf) – bovine milk	390-41
Lactoferrin antigen, native	LA478
Lambda Light Chain	
Lambda light chain polyclonal antibody	
Human lambda light chain antibody	JP141
Lambda b+f, anti-human polyclonal antibody	GLBF-80A
Lambda light chain antigen	
Lambda free light chain antigen from human urine	420-12
Pepsin	
Pepsin antibody	
Pepsin antibody	HM1134
Pepsin antibody	HM1136

抗体
抗原
生物样本

产品	目录号
Alpha-1-Acid Glycoprotein	
Alpha-1-acid glycoprotein antigen	
Human serum alpha-1-acid glycoprotein (AGP, A1AG)	102-11
Actin	
Actin antigen	
1 mg Actin from rabbit muscle, lyophilized	102-91-1
10 mg Actin from rabbit muscle, lyophilized	102-91-10
100 mg Actin from rabbit muscle, lyophilized	102-91-100
Lactoferrin (LF)	
Lactoferrin antigen	
5 mg Lactoferrin, apo - human milk	390-11-5
0.1 mg Apo-Lactoferrin, bovine milk	390-41-0.1
1.0 mg Apo-Lactoferrin, bovine milk	390-41-1
10 mg Apo-Lactoferrin, bovine milk	390-41-10
Cathepsin G	
Cathepsin antigen	
Cathepsin G, human neutrophil, 0,1 mg	186-10-0.1
Cathepsin G, human neutrophil, 1 mg	186-10-1
Cathepsin G, human neutrophil, 10 mg	186-10-10
Anti-Streptolysin O	
Streptolysin antigen	
Streptolysin O (SLO) antigen	527-92
Streptolysin O	LA318
Streptolysin fluid	
Anti streptolysin O (ASO), human plasma	124-09
1 ml antistreptolysin O (ASO), human plasma	124-09-1
10 ml antistreptolysin O (ASO), human plasma	124-09-10
Anti-Citrullinated Protein Antibodies	
CCP fluid	
Human anti-CCP positive plasma samples	991-58-CCP-1
Rheumatoid factor	
RF fluid	
Rheumatoid factor (RF) from human plasma (concentration > 25,000 IU/mL)	508-27
Rheumatoid factor positive serum	991-24-RF
Rheumatoid arthritis (RA) serum, human donor	991-24-S-RA
Rheumatoid factor (RF) positive plasma, human donors	991-55
Plasma - rheumatoid factor (RF) positive, human donor	991-58-S-RF
Rheumatoid factor (IgM), native ≥95%	LA180

产品列表

	抗体	抗原
Actin		✓
Alpha-1-acid glycoprotein	✓	
Alpha-1 antitrypsin	✓	✓
Anti-CCP		✓
Apo-Lactoferrin		✓
ASO		✓
Azurocidin		✓
C3	✓	✓
C4	✓	✓
Calprotectin	✓	✓
Cathepsin G		✓
CD25 / IL-2R	✓	✓
CD126		✓
Ceruloplasmin	✓	✓
CRP	✓	✓
Elastase	✓	✓
Heparin binding protein	✓	✓
IFNγ		✓
Interleukin 1β		✓
Interleukin 2	✓	✓
Interleukin 4		✓
Interleukin 6	✓	✓
Interleukin 8		✓
Interleukin 10		✓
Interleukin 12		✓
Interleukin 13		✓
Interleukin 17A		✓
Kappa light chains	✓	✓
Lactoferrin	✓	✓
Lambda light chains	✓	✓
NGAL	✓	✓
Pepsin	✓	✓
Prealbumin	✓	✓
Procalcitonin	✓	✓
Rheumatoid factor		✓
Serum amyloid A	✓	✓
Streptolysin O		✓
TNFα		✓
Transferrin	✓	✓
Trypsinogen-2		✓

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CPS = Counts per second
CLIA = Chemiluminescence immunoassay
ELISA = Enzyme-linked immunosorbent assay
FIA = Fluoroimmunoassay
IHC = Immunohistochemistry
IT = Immunoturbidimetry
LF = Lateral flow
N/A = Not Applicable
N/D = Not Determined
RLU = Relative light units
T/C = Test line signal/ control line signal
WB = WesternBlot

本技术说明中显示的结果为未经优化的初步结果，表明可以进行临床样本检测分析。可能需要进一步的分析优化以获得最佳性能结果。