

## Tocilizumab/Atlizumab;托西珠单抗

产品编号: MB2751

质量标准:>95%,蛋白原液

包装规格:1MG/5MG

产品形式:

### 基本信息

分子式	C6428H9976N1720O2018S42	
分子量	145KD	
CAS NO	375823-41-9	
储存条件	-70 ± 15°Cfor long-term storage, 2-8°Cfor short-term storage, away from light	

简介: Tocilizumab (anti-IL-6R) is a humanized monoclonal antibody that binds to the interleukin-6 receptor.

**产品形式:**蛋白原液 。每种装于冻存管中,单抗质量为标示数量 1MG 或者 5MG,体积根据其浓度不同略有不同。

#### 质量标准:

Non-reduced CE-SDS:	>90%;
SEC-HPLC:	>95%;
Bacterial Endotoxins Test:	<10EU/ml
Residual Proteins of HostCell:	<100 ng/mg
Exogenous residual DNA:	<100pg/mg
Residual Protein A:	.<100 ng/mg

储存条件: -70  $\pm$  15 $^{\circ}$ Cfor long-term storage, 2-8 $^{\circ}$ Cfor short-term storage, away from light.

## 使用建议:

meilunbio 提供的产品为蛋白原液形式。每种装于冻存管中,单抗质量为标示数量 1MG 或者 5MG,体积根据其浓度不同略有不同。

使用前可以根据自己实验需求进行稀释,溶剂建议用去离子无菌水(meilunbio 货号 MA0028,去离子无菌水(细胞培养用水))或者 PBS (meilunbio 货号 MA0015PBS(1X),细胞培养级)。

不建议使用含有防腐成分的稀释液进行稀释,会增加细胞或者动物毒性。

稀释前,计算加入多少体积溶剂,请参考购买批次质检单上蛋白浓度,或者询问我司,



举例,质检单显示该批次单抗蛋白原液蛋白浓度为 50mg/ml

对应 5MG 包装的蛋白原液体积为 5mg (质量) /50mg/ml(浓度)=0.1ML,

实验需求蛋白浓度为 10mg/ml, 需要稀释倍数为 50/10=5, 则需要加入 0.4ML,即 400ul PBS 或者无菌去离子水即可。

若给药量为固定质量值,比如单次给药 0.5MG,对应蛋白原液给药体积为 10ul,建议稀释后,提高给药体积降低误差,因为注射器或者移液器吸头残留会影响实验效果。

稀释后的蛋白溶液,可于2-8度冷藏避光保存不超过2周,不建议长期储存。

避免反复冻融,每次冻融蛋白活性会降低约5%左右。

#### 生物活性(仅来自于公开文献,不保证其有效性)

描述	Tocilizumab (anti-IL-6R) is a humanized monoclonal antibody that binds to the interleukin-6 receptor.
靶点	IL-6 receptor
体外	Tocilizumab (anti-IL-6R) inhibits the binding of IL-6 to its receptors, and thus reduces the cytokines pro-inflammatory activity by competing for both the soluble and membrane-bound forms of the human IL-6 receptor. The inhibitory profile of anti-IL-6R mAb Tocilizumab is independent of membrane-bound IL-6R expression. Tocilizumab has anticancer potency via apoptosis induction as an agonistic IL-6R regulator. It has also been demonstrated that tocilizumab has an anti-proliferative effect on glioma cells via inhibition of the JAK-STAT3 pathway. Tocilizumab exhibits a significant growth inhibition in NSCLC cells (H460, A549, H1299 and H358), with proliferation significantly decreased by approximately 40% in A549 cells. Tocilizumab does not alter the levels of the ERK1/2, STAT3, NFκB and phosphorylated ERK1/2 and STAT3 proteins, but this antibody does considerably increase the expression of phosphorylated NFκB in NSCLC cells. Tocilizumab significantly inhibits expression of both IL-8 and MMP-9, known as the major angiogenic factors.
体内	A series of clinical studies has shown that inhibition of IL-6 signaling by tocilizumab is therapeutically effective in rheumatoid arthritis, juvenile idiopathic arthritis, Castleman's disease, and Crohn's disease. In all of these diseases, tocilizumab ameliorates inflammatory manifestations, and normalizes acute phase protein levels. Tocilizumab as a monotherapy and in combination, such as with methotrexate in case of rheumatoid arthritis, seems to be well tolerated. Tocilizumab markedly decreases the number of invaded capillary vessels in tumors. In addition, tocilizumab shows almost no effect on mitogenic rate and apoptosis of tumor cells.

## 实验参考方法(仅来自公开文献,供参考)

## 细胞实验:

Objective: To validate that IL-6 signaling is essential for TAM (tumor-associated macrophages)-enhanced CSC (cancer stem cells) function Concentrations: 5 µg/ml Incubation Time: 72 h Method: For co-culture experiments, 12-well Transwell chambers were used with 2×105 HepG2 or Hep3B cells seeded in the lower chamber one day before co-culture and either 5×105 or 1×106 TAMs added in the upper chamber. Tocilizumab or human IgG antibody were added in indicated experiments to selected wells. After 24 to 72





hours, HCC cells and CD14+ TAM cells were collected separately for analysis. Cells: HepG2 cell lines, TAMs isolated from HCCs (hepatocellular carcinoma)

# 动物实验

Objective: Therapeutic assessment of Tocilizumab-Alendronate Conjugate in collagen-induced arthritis (CIA) mice model Formulation: PBS Dosages: 0.8 mg/kg Administration: Locally injected on the arthritic ankle joints Animal Models: DBA/1j mice were injected with CII which emulsified in CFA or IFA.

## 美仑相关产品推荐(更多相关靶点抑制剂请详询官网或客服)

产品编号	品名.	Target
MB2806	aflibercept	VEGFR
MB2786	Alemtuzumab	CD52
MB2787	Alirocumab	PCSK9
MB2789	Avelumab	PDL-1
MB2790	Atezolizumab	PDL-1
MB2791	Bevacizumab	VEGF
MB2792	Cetuximab	EGFR
MB2803	Daratumumab	CD38
MB2794	Denosumab	RANK Ligand
MB2023	Eculizumab	补体蛋白(C5)
MB2795	Etanercept	TNF
MB2797	Evolocumab	PCSK9
MB2773	Infliximab	TNF-α
MB2769	Ipilimumab	CTLA-4
MB2772	Matuzumab	EGFR
MB2766	Mepolizumab	IL-5
MB2767	Nivolumab	PD-1
MB2774	Obinutuzumab	CD20
MB2776	Ofatumumab	CD20
MB2777	Omalizumab	IgE
MB2781	Panitumumab	EGFR
MB2761	Pembrolizumab	PD-1

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MB2762	Pertuzumab	HER2
MB2763	Ranibizumab	VEGFR
MB2938	Ramucirumab	VEGFR
MB2749	Rituximab	CD20
MB2757	Secukinumab	IL-17
MB2784	Adalimumab	TNF-α
MB2753	Trastuzumab	ErbB2
MB2758	Ustekinumab	IL-12

用途及描述: 仅供科研,严禁用于人体(For R&D Only)

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