

## CHASELECTION

### Recombinant Mouse IL-6, Tag Free

货号(Catalog Number): CY163FXXXX(L)

别名(synonym): BSF2; BSF-2; CDF; CTL differentiation factor ; HSF; IFNB2; IFN-beta-2; IL6; IL-6

来源(Source): Human embryonic kidney cell, HEK293-derived mouse IL-6 protein

蛋白结构(Structure): 该蛋白不含标签

基因 ID: P08505

#### 氨基酸序列

Phe25-Thr211

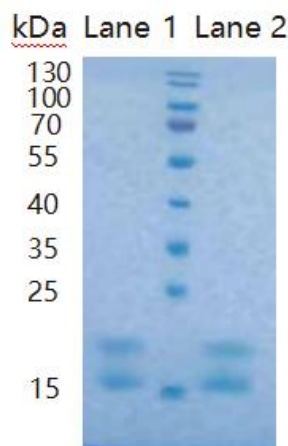
#### 分子量大小(MW)

21.8KDa

#### 纯度(Purity)

> 95%, determined by SDS-PAGE

#### SDS-PAGE



4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

#### 制剂(Formulation)

Solution protein.

Dissolved in sterile PBS buffer.

This solution can be diluted into other aqueous buffers.

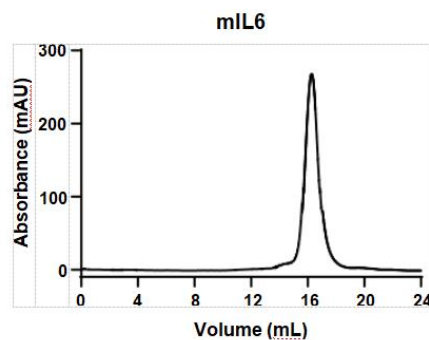
Centrifuge the vial prior to opening.

版本号: IN-PA-73-00

#### 内毒素含量(Endotoxin)

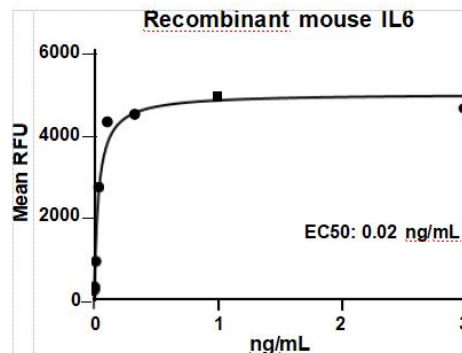
<0.010 EU per 1 ug of the protein by the LAL method

#### Gel filtration



Size-exclusion chromatography of recombinant mouse IL6 protein (280 nm absorbance)

#### 生物活性(Bioactivity)



Recombinant mouse IL6 stimulates cell proliferation of the T1165.85.2.1 mouse plasmacytoma cells

#### 储存与运输(Storage)

Avoid repeated freeze-thaw cycles.

It is recommended that the protein be aliquoted for optimal storage.

36 months from date of receipt, -20 to -70 °C as supplied.

#### 产品背景介绍(Production)

Interleukin-6 (IL-6) plays important roles in the acute phase reaction, inflammation, hematopoiesis, bone metabolism, and cancer progression. Mature mouse IL-6 is 187 amino acids (aa) in length and shares 39% and 85% aa sequence identity with human and rat IL-6, respectively. IL-6 induces signaling through a cell surface heterodimeric receptor complex composed of a ligand binding subunit (IL-6 R alpha) and a signal transducing subunit (gp130). IL-6 binds



to IL-6 R alpha, triggering IL-6 R alpha association with gp130 and gp130 dimerization. Soluble forms of IL-6 R alpha are generated by both alternative splicing and proteolytic cleavage. In a mechanism known as trans-signaling, complexes of soluble IL-6 and IL-6 R alpha elicit responses from gp130-expressing cells that lack cell surface IL-6 R alpha. Trans-signaling enables a wider range of cell types to respond to IL-6, as the expression of gp130 is ubiquitous, while that of IL-6 R alpha is predominantly restricted to hepatocytes, monocytes, and resting lymphocytes. IL-6, along with TNF-alpha and IL-1, drives the acute inflammatory response and the transition from acute inflammation to either acquired immunity or chronic inflammatory disease. When dysregulated, it contributes to chronic inflammation in obesity, insulin resistance, inflammatory bowel disease, arthritis, sepsis, and atherosclerosis. IL-6 can also function as an anti-inflammatory molecule, as in skeletal muscle where it is secreted in response to exercise. In addition, it enhances hematopoietic stem cell proliferation and the differentiation of Th17 cells, memory B cells, and plasma cells.

