

PRODUCT DATASHEET

Pentraxin 3 Human HEK293

Cat. No.: RD172477100

Type: Recombinant protein

Size: 0.1 mg

Source: HEK293

Species: Human

Description

Total 370 AA. MW: 41.0 kDa (calculated). UniProtKB acc. No. P26022 (Glu18–Ser381). C-terminal His-tag (6 extra AA). Protein identity confirmed by LC-MS/MS.

Other names

PTX3, TSG-14, Pentraxin-related protein PTX3, Tumor necrosis factor-inducible gene 14 protein, TSG14, TSG 14

Introduction to the molecule

Pentraxins are a superfamily of conserved proteins characterized by the pentraxin domain. C-reactive protein (CRP) and serum amyloid protein (SAP) are recognized as classical short pentraxins, whereas pentraxin3 (PTX3) belongs to the long pentraxins. CRP and SAP are induced in the liver in response to IL-6. In contrast, PTX3 is produced by a variety of tissues and cells, such as vascular endothelial cells, macrophages, and neutrophils, predominantly in response to proinflammatory signals (bacterial products, IL-1, and TNF). PTX3 has also been observed in human atherosclerotic lesions of autopsy samples by immunohistochemistry, in association with macrophage and neutrophil infiltration. This localized expression pattern of PTX3 is believed to be indicative of primary inflammation stimuli, in contrast to CRP which is induced via secondary signals.

Research topic

Animal studies, Cardiovascular disease, Immune Response, Infection and Inflammation

Amino Acid sequence

ENSDDYDLMYVNL DNE-IDNGLHPTEDPTPCDCGQEH-SEWDKLFIMLENSQMRER-MLLQATDDVLRGEL-QRLREELGR LAES-LARPCAPGAPAEA

Purity

Purity as determined by densitometric image analysis: > 95%

Endotoxin

< 0.1 EU/μg

Formulation:

Filtered (0.4 μm) and lyophilized from 0.5 mg/ml solution in phosphate buffered saline, pH 7.4.

Reconstitution:

Add 200 μl of deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store the lyophilized protein at $-80\text{ }^{\circ}\text{C}$. Lyophilized protein remains stable until the expiry date when stored at $-80\text{ }^{\circ}\text{C}$. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at $-80\text{ }^{\circ}\text{C}$ for long term storage. Reconstituted protein can be stored at $4\text{ }^{\circ}\text{C}$ for a week.

Quality control

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

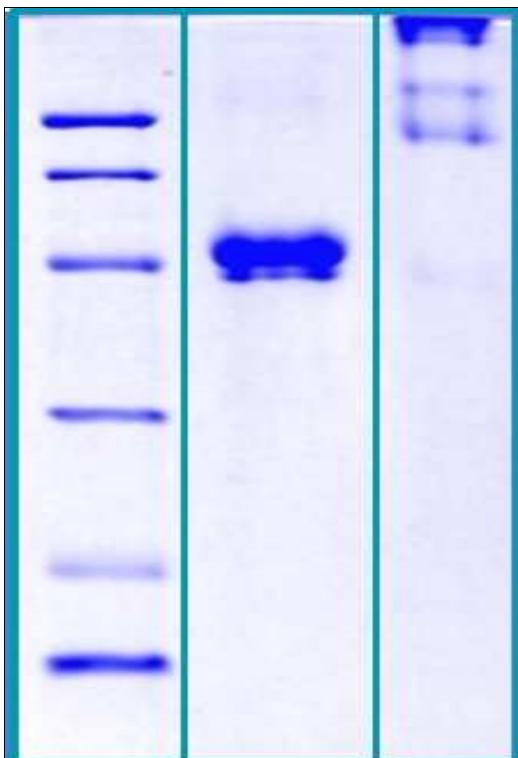
LAL to determine quantity of endotoxin.

Applications

Cell culture and/or animal studies, ELISA, Western blotting

Note

This product is intended for research use only.



12 % SDS-PAGE separation of Human Pentraxin 3 (HEK):

1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. Reduced and boiled sample, 2.5 $\mu\text{g}/\text{lane}$
3. Non-reduced and non-boiled sample, 2.5 $\mu\text{g}/\text{lane}$