For Research Use Only

Recombinant Mouse IGFBP6 protein (rFc Tag)

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Catalog Number: Eg10273

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Mouse IGFBP6 protein Ala26-Gly238 (Accession# P47880) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
16012

Accession:
P47880

Predicted Molecular Mass:
48.3 kDa

SDS-PAGE:
48-60 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Insulin-like growth factor-binding protein 6 (IGFBP6) is a secreted protein with a uniquely high affinity for IGF-II, distinguishing it within the IGFBP family. Beyond its canonical role as an IGF-II antagonist, IGFBP6 possesses diverse IGF-independent functions, including the activation of MAPK and PI3K/Akt pathways to influence cell migration, survival, and metabolism. It can translocate to the nucleus to induce apoptosis and its activity is modulated by proteolytic cleavage via MMPs. Pathologically, IGFBP6 is a context-dependent regulator: it acts as a tumor suppressor in breast cancer (favorable prognosis), an anti-inflammatory factor in atherosclerosis, a driver of cardiac and hepatic fibrosis, an orchestrator of immune collapse in sepsis, and a predictor of reduced type 2 diabetes risk. Thus, IGFBP6 is a pleiotropic target with dual diagnostic and therapeutic potential across oncology, inflammation, metabolism, and cardiovascular disease.

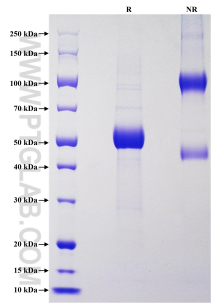
References

1.Schwartz, Martin A. Nature cardiovascular research vol. 4,2 (2025): 122-123.
2.Wang, Zhecun et al. Journal of cellular physiology vol. 235,12 (2020): 9538-9556.
3.Jin, Zhengxin et al. Communications biology vol. 8,1 1127. 29 Jul. 2025,

Synonyms

IBP-6, IGF-binding protein 6, IGFBP-6, Insulin-like growth factor-binding protein 6

Selected Validation Data



Purity of Recombinant Mouse IGFBP6 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.