

For Research Use Only

Recombinant Human HSP47/SERPINH1 protein (His Tag)



Catalog Number: Eg1201

Basic Information

Species:
Human

Purity:
>90 %, SDS-PAGE

Tag:
His Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

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

Source:
HEK293-derived Human HSP47 protein Ala19-Leu418 (Accession# P50454) with a His tag at the C-terminus.

GeneID:
871

Accession:
P50454

Predicted Molecular Mass:
45.3 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°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C 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

HSP47/SERPINH1 is also named as Serpin H1, CBP1, CBP2, 47 kDa heat shock protein, Arsenic-transactivated protein 3 (AsTP3) and Collagen-binding protein (Colligin). It belongs to the serpin family. The Serpin Family H Member 1 (SERPINH1) gene encodes a protein called HSP47, which is required for the correct folding and secretion of collagen. SERPINH1 has been implicated in several collagen-related diseases, such as, brittle bone disease, keloid scars, and lung fibrosis. SERPINH1 also correlates with the grade of glioma, and regulates proliferation, migration and invasion of glioma cell lines. SERPINH1 regulates the Wnt/ β -catenin signaling pathway and modulates gastric cancer (GC) progression. SERPINH1 is aberrantly expressed in cervical cancer, breast cancer, glioblastoma and colorectal cancer. SERPINH1 promotes invasion and metastasis of breast cancer cells by regulating the expression of several extracellular matrix (ECM) proteins.

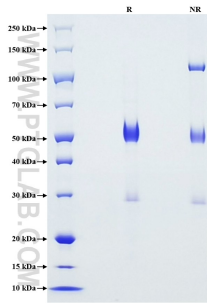
References

1. Duarte BDP, Bonatto D. (2018) J Cancer Res Clin Oncol. 144(12):2319-2328.
2. Tian S, et al. (2020) Aging (Albany NY). 12(4):3574-3593.
3. Zhao D, et al. (2014) J Neurooncol. 118(1):39-47.
4. Zhu J, et al. (2015) Cancer Res. 75(8):1580-91.

Synonyms

HSP47, SERPINH1, 47 kDa heat shock protein, Arsenic-transactivated protein 3, AsTP3

Selected Validation Data



Purity of Recombinant Human HSP47 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.

For technical support and original validation data for this product please contact

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