Recombinant HPSE2 protein (His tag)

Catalog Number	543277
Synonyms	Hpa2
Species	Human
Expression System	E. coli
Accession	Q8WWQ2
Molecular Weight	Predictes a molecular mass of 49.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	171-592
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 171-592 aa (Q8WWQ2) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Inactive Heparanase-2 (Hpa2) Fragment (171-592) is a high-affinity heparan sulfate-binding protein derived from human HPSE2. This 422-amino acid fragment is engineered for stability and solubility, making it an ideal tool for investigating heparanase inhibition mechanisms and extracellular matrix interactions in biochemical and structural studies. Inactive Heparanase-2 (Hpa2), encoded by the HPSE2 gene in humans, is a secreted protein that localizes to the extracellular space and extracellular matrix. It binds heparin and heparan sulfate with high affinity but lacks enzymatic heparanase activity. Functionally, Hpa2 acts as a competitive inhibitor of heparanase (HPSE) by binding to its substrates, as demonstrated in vitro studies. This inhibitory role highlights its potential significance in modulating extracellular matrix remodeling and heparan sulfate-dependent signaling pathways.