Recombinant SULF2 protein (His tag)

Catalog Number	543093
Synonyms	hSulf-2; Arylsulfatase; N-acetylglucosamine-6-sulfatase
Species	Human
Expression System	E. coli
Accession	Q8IWU5
Molecular Weight	Predictes a molecular mass of 52.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	42-478
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 42-478 aa (Q8IWU5) 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 Extracellular Sulfatase Sulf-2 (hSulf-2) Fragment (aa 42-478) is a high-quality, soluble protein designed for structural and biochemical studies. This 437-amino acid fragment retains key enzymatic activities, including arylsulfatase and specific endoglucosamine-6-sulfatase functions, making it ideal for investigating heparin sulfate modification and sulfatase mechanisms in controlled experimental settings. Extracellular Sulfatase Sulf-2 is a human enzyme with dual catalytic activities: arylsulfatase (EC 3.1.6.1) and N-acetylglucosamine-6-sulfatase (EC 3.1.6.14). It specifically removes sulfate groups from the C-6 position of glucosamine residues within intact heparin, playing a crucial role in modulating heparan sulfate proteoglycan function. The full-length protein localizes to multiple cellular compartments including the endoplasmic reticulum, Golgi apparatus, and cell surface, while the secreted form (corresponding to this recombinant fragment) functions extracellularly. Sulf-2's ability to edit sulfate patterns on heparin sulfate chains makes it significant for studying extracellular matrix remodeling, growth factor signaling, and related physiological processes.