Recombinant ST2B1 protein (His tag)

Catalog Number	541695
Synonyms	Alcohol sulfotransferase; Hydroxysteroid sulfotransferase 2; Sulfotransferase family 2B member 1; Sulfotransferase family cytosolic 2B member 1; ST2B1
Species	Human
Expression System	E. coli
Accession	O00204
Molecular Weight	Predictes a molecular mass of 37.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	1-311
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-311 aa (O00204) 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 Human Sulfotransferase 2B1 (EC 2.8.2.2) Fragment (aa 1-311) - A highly purified, stable protein fragment ideal for studying cholesterol and steroid sulfation mechanisms, structural analysis, and enzymatic characterization in biochemical research applications. Sulfotransferase 2B1 is a crucial cytosolic enzyme that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as a sulfonate donor to catalyze sulfate conjugation reactions. This enzyme plays a vital role in cholesterol metabolism, preferentially sulfating cholesterol while also demonstrating significant activity with steroid substrates including pregnenolone and dehydroepiandrosterone (DHEA). Its function extends to epidermal cholesterol metabolism, where it regulates epidermal proliferation and differentiation processes. The enzyme localizes primarily to the cytoplasm and cytosol, with additional presence in microsomes and nuclei, where phosphorylation-dependent nuclear translocation occurs. Isoform-specific differences exist, with certain variants showing distinct substrate preferences between cholesterol and pregnenolone sulfation.