Recombinant P2RX5 protein (His tag)

Catalog Number	543329
Synonyms	P2X5; ATP receptor; Purinergic receptor
Species	Human
Expression System	E. coli
Accession	Q93086
Molecular Weight	Predictes a molecular mass of 31.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	52-319
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 52-319 aa (Q93086) 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 P2X5 (P2X purinoceptor 5) Fragment (aa 52-319) - A high-quality recombinant protein representing a stable and soluble unit of the ATP-gated cation channel, ideal for structural studies and biochemical characterization of purinergic signaling mechanisms. The P2X5 receptor is an ATP-gated nonselective transmembrane cation channel that exhibits permeability to potassium, sodium, calcium, and uniquely among P2X receptors, also to chloride ions. This purinergic receptor is primarily localized to the cell membrane as a multi-pass membrane protein and is implicated in inflammatory response pathways. While isoform 1 is non-functional, isoform 6 demonstrates full channel activity. The selected fragment (amino acids 52-319) was computationally designed to provide a stable, soluble representation of the protein domain, facilitating research into the structural basis of P2X receptor function and ATP-mediated signaling in human physiological processes.