Recombinant P2RX4 protein (His tag)

Catalog Number	545765
Synonyms	P2X4; ATP receptor; Purinergic receptor
Species	Human
Expression System	E. coli
Accession	Q99571
Molecular Weight	Predictes a molecular mass of 33.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	55-338
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 55-338 aa (Q99571) 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 P2X4 (P2X purinoceptor 4) Fragment (aa 55-338) – a high-purity, soluble protein fragment ideal for structural studies, biochemical assays, and investigating ATP-gated ion channel mechanisms in immune and neurological research. The full-length P2X4 receptor is an ATP-gated nonselective cation channel permeable to potassium, sodium, and calcium, playing critical roles in immunity and central nervous system physiology. It contributes to T-cell activation, Th17 cell differentiation via RORC expression, and microglia motility through the PI3K/Akt pathway. P2X4 is localized to the cell membrane and lysosomal membrane, where it functions as a multi-pass transmembrane protein, potentially acting as an ATP-gated channel in lysosomal membranes. This fragment (aa 55-338) represents a stable, soluble region selected for structural and functional analyses, enabling focused research on its channel properties without domain-specific constraints.