Recombinant P2RX2 protein (His tag)

Catalog Number	543804
Synonyms	P2X2; ATP receptor; Purinergic receptor
Species	Human
Expression System	E. coli
Accession	Q9UBL9
Molecular Weight	Predictes a molecular mass of 31.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	64-337
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 64-337 aa (Q9UBL9) 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 P2X purinoceptor 2 (P2X2) fragment (residues 64-337) is a high-quality protein product designed for structural and biochemical studies. This 274-amino acid fragment represents a stable, soluble unit of the ATP-gated cation channel, enabling researchers to investigate the molecular mechanisms of purinergic signaling in neuronal and sensory systems. P2X purinoceptor 2 (P2X2) is an ATP-gated nonselective transmembrane cation channel that permits the flow of potassium, sodium, and calcium ions upon activation by extracellular ATP. This receptor mediates diverse cellular responses including excitatory postsynaptic signaling in sensory neurons, neuromuscular junction formation, hearing, taste perception, and intestinal peristalsis. In the inner ear, P2X2 plays critical roles in sound transduction, auditory neurotransmission, outer hair cell electromotility, and potassium recycling. The protein localizes to the cell membrane as a multi-pass membrane protein and is particularly found in apical membranes of cochlear hair cells. The full-length protein facilitates synaptic transmission between neurons and from neurons to smooth muscle, making it essential for numerous physiological processes.