Recombinant PTC1 protein (His tag)

Catalog Number	542644
Synonyms	PTC; PTC1
Species	Human
Expression System	E. coli
Accession	Q13635
Molecular Weight	Predictes a molecular mass of 37.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	122-436
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 122-436 aa (Q13635) 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 Protein patched homolog 1 (PTC1) fragment (residues 122-436) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment represents a stable region of PTCH1, enabling detailed investigation of its role as a receptor in the Hedgehog signaling pathway. Protein patched homolog 1 (PTCH1) functions as a receptor for sonic hedgehog (SHH), indian hedgehog (IHH), and desert hedgehog (DHH). It associates with smoothened protein (SMO) to transduce Hedgehog signaling and exhibits tumor suppressor activity, where its inactivation is implicated in tumorigenesis. The full-length protein is localized to the cell membrane as a multi-pass membrane protein, underscoring its critical role in cellular signaling and disease pathways.