Recombinant PPA5 protein (His tag)

Catalog Number	537528
Synonyms	TR-AP; Tartrate-resistant acid ATPase; TrATPase; Type 5 acid phosphatase
Species	Human
Expression System	E. coli
Accession	P13686
Molecular Weight	Predictes a molecular mass of 35.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	22-325
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 22-325 aa (P13686) 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 Tartrate-resistant acid phosphatase type 5 (TR-AP) fragment (residues 22-325) is a high-purity protein designed for structural and biochemical studies. This 304-amino acid fragment retains key functional regions, offering a stable and soluble unit ideal for investigating phosphatase activity and osteopontin dephosphorylation mechanisms. Tartrate-resistant acid phosphatase type 5 (TR-AP), encoded by the ACP5 gene, is a lysosomal enzyme involved in the dephosphorylation of osteopontin and bone sialoprotein. Its expression is notably elevated in pathological conditions such as Gaucher disease, Hodgkin disease, and various leukemias (including hairy cell, B-cell, and T-cell leukemias), highlighting its potential role in disease mechanisms and as a biomarker. The protein localizes to lysosomes, where it contributes to phosphate metabolism and cellular regulation.