Recombinant PDP2 protein (His tag)

Catalog Number	550248
Synonyms	PDP 2; Pyruvate dehydrogenase phosphatase catalytic subunit 2; PDPC 2
Species	Human
Expression System	E. coli
Accession	Q9P2J9
Molecular Weight	Predictes a molecular mass of 52.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	76-529
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 76-529 aa (Q9P2J9) 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 PDP2 Protein Fragment (aa 76-529) – a high-purity, functional fragment encompassing the PPM-type phosphatase domain, ideal for investigating mitochondrial pyruvate dehydrogenase regulation and T cell metabolism. PDP2 is a mitochondrial enzyme that catalyzes the dephosphorylation and reactivation of the E1 alpha subunit of the pyruvate dehydrogenase complex (PDC), thereby promoting the conversion of pyruvate to acetyl-CoA. It serves as a critical regulator of T cell metabolism and function, with particular importance in T-helper Th17 cells. The protein is localized to the mitochondrion, where it modulates metabolic pathways essential for cellular energy production and immune responses.