Recombinant NUD4B protein (His tag)

Catalog Number	549685
Synonyms	DIPP-2B; Nucleoside diphosphate-linked moiety X motif 4B; Nudix motif 4B; Nudix hydrolase 4B
Species	Human
Expression System	E. coli
Accession	A0A024RBG1
Molecular Weight	Predictes a molecular mass of 18.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1-146
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 1-146 aa (A0A024RBG1) 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 NUDT4B (DIPP-2B) Fragment (aa 1-146) is a high-purity protein preparation encompassing the complete Nudix hydrolase domain. This fragment serves as an essential tool for investigating diphosphoinositol polyphosphate metabolism and signal transduction pathways, providing researchers with a functional domain-specific reagent for enzymatic and binding studies. Diphosphoinositol polyphosphate phosphohydrolase NUDT4B (DIPP-2B) is a human enzyme that plays a crucial role in cellular signaling by cleaving beta-phosphate groups from diphosphoinositol polyphosphates including PP-InsP5, PP-InsP4, and [PP]2-InsP4. This enzymatic activity suggests its involvement in inositol pyrophosphate-mediated signal transduction pathways. The protein also demonstrates hydrolase activity toward dinucleoside oligophosphate Ap6A, producing ADP and p4a as major reaction products, and can hydrolyze 5-phosphoribose 1-diphosphate. While it binds U8 snoRNA, it does not participate in U8 snoRNA decapping. NUDT4B is primarily localized in the cytoplasm, where it likely executes its metabolic functions in cellular signaling networks.