Recombinant OARD1 protein (His tag)

Catalog Number	546328
Synonyms	O-acetyl-ADP-ribose deacetylase 1; Terminal ADP-ribose protein glycohydrolase 1; [Protein ADP-ribosylglutamate] hydrolase OARD1
Species	Human
Expression System	E. coli
Accession	Q9Y530
Molecular Weight	Predictes a molecular mass of 18.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	2-152
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2-152 aa (Q9Y530) 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 OARD1 (ADP-ribose glycohydrolase OARD1) Fragment (aa 2-152) is a high-purity protein designed for studying ADP-ribose metabolism and protein de-ADP-ribosylation. This fragment fully encompasses the essential Macro domains, making it an ideal tool for investigating specific enzymatic functions and regulatory mechanisms in epigenetic signaling and DNA damage response. OARD1 is a multifunctional ADP-ribose glycohydrolase that hydrolyzes ADP-ribose and acts on various substrates, including proteins ADP-ribosylated on glutamate residues and O-acetyl-ADP-D-ribose. It specifically functions as a glutamate mono-ADP-ribosylhydrolase, removing mono-ADP-ribose attached to glutamate residues on proteins, and deacetylates O-acetyl-ADP ribose—a key signaling molecule generated during histone and protein deacetylation. OARD1 is localized in the nucleus, nucleoplasm, and nucleolus, and relocalizes to the nucleoplasm and DNA lesion regions in response to DNA damage, highlighting its critical role in epigenetic regulation and cellular stress responses.