

Recombinant Protein Technical Manual Recombinant Mouse DPP7/DPPII/DPP2 Protein (His Tag)(Active) RPES1042

Product Data:

Product SKU: RPES1042	<b>Size:</b> 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: Q9ET221

## **Protein Information:**

Molecular Mass:	53.7 kDa
AP Molecular Mass:	65 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to cleave the fluorogenic peptide substrate, Lys-Pro-AMC(KP-AMC). The specific activity is > 20,000 pmoles/min/ $\mu$ g.
Purity:	> 92 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per $\mu g$ of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Dpp2;DPPII;QPP

## Sequence: Met1-Arg 506

## Background:

DPP7 (dipeptidylpeptidase 7), also known as DPPII and DPP2, is a post-proline cleaving aminopeptidase expressed in quiescent lymphocytes. Dipeptidyl peptidases (DPPs) have post-proline dipeptidyl aminopeptidase activity, cleaving Xaa-Pro dipeptides from the N-termini of proteins. DPPs mediate regulatory activity of their substrates and have been linked to a variety of diseases including type 2 diabetes, obesity and cancer. DPPs can bind specific voltage-gated potassium channels and alter their expression and biophysical properties and may also influence T cells. DPP proteins include DPRP1, DPRP2, DPP3, DPP7, DPP10, DPPX and CD26. It localizes to lysosomes. DPP7 localizes to lysosomes and exists as a homodimer via its leucine zipper motif and is involved in the degradation of oligopeptides. In response to calcium release, it can be secreted in its active form. It is essential for lymphocyte survival, as the inhibition of DPP7 results in quiescent cell apoptosis.