

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse DPPII/QPP/DPP7 in direct ELISAs and Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human DPPII is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse DPPII/QPP/DPP7 Asp34-Arg506 Accession # NP_114031
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse DPPII/QPP/DPP7 (Catalog # 3436-SE)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse DPPII/QPP/DPP7 (Catalog # 3436-SE), see our available Western blot detection antibodies
Neutralization		Measured by its ability to neutralize Recombinant Mouse DPPII/QPP/DPP7 (0.02 µg/mL, Catalog # 3436-SE) cleavage of the fluorogenic peptide substrate KP-Amc (10 µM). The Neutralization Dose (ND ₅₀) is typically 0.45 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Dipeptidyl-peptidase II (DPPII) is identical to quiescent cell proline dipeptidase (QPP) and dipeptidylpeptidase 7 (DPP7) (1, 2). It shares some substrate and cleavage specificity with DPPIV/CD26, DPP8, DPP9 and seprase/FAP (fibroblast activation protein), members of the S09 family of serine proteases. As prolyl proteases that cleave proteins and peptides after proline residues, these enzymes have a high potential for drug discovery (3, 4). However, DPP7 is not a member of the S09 family, but a member of the S28 family that also includes lysosomal Pro-X carboxypeptidase/prolylcarboxypeptidase/PRCP and thymus-specific serine peptidase/PRSS16 (2). The mouse DPP7 precursor consists of a signal peptide (amino acids (aa) 1-33) and a mature chain (aa 34-506). The purified recombinant mouse DPP7 is active against Lys-Pro-AMC and Lys-Ala-AMC. Its activity against Lys-Pro-AMC is approximately 10-fold of that against Lys-Ala-AMC under otherwise identical conditions.

References:

1. Araki, H. *et al.* (2001) *J. Biochem.* **129**:279.
2. Maes, M.-B. *et al.* (2005) *Biochem. J.* **386**:315.
3. Rosenblum, J.S. and J.W. Kozarich (2003) *Curr. Opin. Chem. Biol.* **7**:496.
4. Lankas, G.R. *et al.* (2005) *Diabetes* **54**:2988.