



Monoclonal Anti-human DPPII/QPP/DPP7 Antibody

ORDERING INFORMATION

Catalog Number: MAB34381

Clone: 398024

Lot Number: ZOT01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human DPP7

Immunogen: NS0-derived rhDPP7

Ig class: rat IgG_{2A}

Recommended Application:
Western blot

Other Application:
Direct ELISA

Background

Dipeptidyl-peptidase II (DPPII), also known as quiescent cell proline dipeptidase (QPP) and DPP7, 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. They are all prolyl proteases that cleave proteins and peptides after proline residues. 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. The amino acid sequence of human DPP7 is 99%, 81%, 80%, 79% and 65% identical to that of chimpanzee, mouse, rat, dog and chicken.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, NS0-derived, recombinant human DPP7 (rhDPP7; Accession # NP_037511; aa 22 - 492; R&D Systems, Catalog # 3438-SE). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhDPP7 in direct ELISAs and Western blots. In these applications, this antibody shows 5% cross-reactivity with rmDPP7.

Applications

Western blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human DPP7. Using a colorimetric detection system, the detection limit for rhDPP7 is approximately 25 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo™ Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human DPP7. The detection limit for rhDPP7 is approximately 3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.