



Monoclonal Anti-human DDR1 Antibody

ORDERING INFORMATION

Catalog Number: MAB2396

Clone: 290420

Lot Number: VTD02

Size: 100 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human DDR1

Immunogen: NS0-derived rhDDR1
extracellular domain

Ig class: mouse IgG_{2A}

Recommended Application:
Western blot

Other Application:
Direct ELISA

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Discoidin Domain Receptor 1 (rhDDR1) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. DDR1, also called CD167a, is a type I transmembrane glycoprotein belonging to the discoidin-like domain containing subfamily of receptor tyrosine kinases. It is a receptor for collagen. The membrane-anchored receptor can be proteolytically processed to generate a soluble protein.

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 was selected for its ability to detect human DDR1 in direct ELISAs and Western blots. In these formats, this antibody does not cross-react with rhDDR2.

Applications

Western Blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human DDR1. Using a colorimetric detection system, the detection limit for rhDDR1 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 DDR1. The detection limit for rhDDR1 is approximately 3 ng/well.

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