



Monoclonal Anti-mouse TWEAK R/TNFRSF12 Antibody

ORDERING INFORMATION

Catalog Number: MAB16101

Clone: 314636

Lot Number: XGQ01

Size: 100 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse TWEAK R

Immunogen: *E. coli*-derived rmTWEAK R extracellular domain

Ig class: rat IgG_{2a}

Recommended Applications:

Western blot
Flow cytometry

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 rat immunized with purified, *E. coli*-derived recombinant mouse TNF-related Weak Inducer of Apoptosis Receptor. (rmTWEAK R; aa 28 - 79; Accession # NP_038777). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. TWEAK R, also called Fn14 (FGF-inducible 14), is the smallest known member of the TNF receptor family. TWEAK R is a type I transmembrane protein that binds TWEAK and associates with TRAF proteins. Expression in a variety of cell types and organs is regulated by FGF and other mitogens. Human and mouse TWEAK R share 92% amino acid identity in the extracellular domain. Despite lack of evidence for dimerization or posttranslational processing, TWEAK R migrates at 22 - 23 kDa rather than the predicted 11 kDa.

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 mouse TWEAK R in direct ELISAs and western blots. In these formats, this antibody shows no cross-reactivity with rmEDA, rmNeogenin, rhTWEAK R, rmOPG, or rmTNF R1.

Applications

Western Blot - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect mouse TWEAK R. Using a colorimetric detection system, the detection limit for rmTWEAK R is approximately 10 ng/lane under non-reducing conditions. Use of this antibody under reducing conditions is not recommended. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

Flow Cytometry - Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10⁵ cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as goat anti-mouse/rat IgG conjugated to a fluorochrome.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse TWEAK R. The detection limit for rmTWEAK R is approximately 10 ng/well.

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

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1-800-343-7475

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