Biotinylated Anti-mouse Dkk-1 Antibody

ORDERING INFORMATION

Catalog Number: BAM1765

Clone: 259631

Lot Number: VNO01

Size: 100 μg

Formulation: 0.2 μm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse Dkk-1

Immunogen: NS0-derived rmDkk-1

Ig class: rat IgG_{2B}

Recommended Applications:
Immunohistochemistry
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 rat immunized with purified, NS0-derived, recombinant mouse Dickkopf homolog 1 (rmDkk-1). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography and then biotinylated. Dkk-1 is a Dickkopf-related protein that inhibits Wnt signaling by binding the Wnt co-receptor LRP5/6. It also binds Kremen-1 and Kremen-2. Dkk-1 is important in embryonic development.

Formulation
Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 50 μg bovine serum albumin (BSA) per 1 μg of antibody.

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 mouse Dkk-1 by immunohistochemistry. In direct ELISAs and western blots, this antibody does not cross-react with rhDkk-1, rmDkk-2, rmDkk-3, or rmDkk-4.

Applications
Immunohistochemistry – This antibody was used at a concentration of 25 μg/mL with appropriate secondary reagents to detect Dkk-1 in frozen mouse embryo tissue sections. For chromogenic detection of labeling, the use of R&D Systems' Cell and Tissue Staining Kits (CTS Series) is recommended.

Western Blot - This antibody can be used at 1 - 2 μg/mL with the appropriate secondary reagents to detect mouse Dkk-1. Using a colorimetric detection system, the detection limit for rmDkk-1 is approximately 5 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 mouse Dkk-1. The detection limit for rmDkk-1 is approximately 1 ng/well.

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

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