



Monoclonal Anti-mouse IGFBP-1 Antibody

ORDERING INFORMATION

Catalog Number: MAB1240

Clone: 176110

Lot Number: HFJ03

Size: 500 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse IGFBP-1

Immunogen: NS0-derived rmlIGFBP-1

Ig class: rat IgG_{2b}

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 rat immunized with purified, NS0-derived, recombinant mouse insulin-like growth factor binding protein 1 (rmlIGFBP-1). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. IGFBP-1 is one of several proteins that bind IGF with high affinity and modulate IGF activity. IGFBP-1 binds equally well to IGF-I and IGF-II. IGFBP-1 is expressed in liver, decidua, kidneys and is the most abundant IGFBP in amniotic fluid.

Formulation

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

Reconstitution

Reconstitute with sterile PBS. If 1 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 IGFBP-1 in direct ELISAs and western blots. In western blots, this antibody showed weak cross-reactivity with rmlIGFBP-5 and no cross-reactivity with rhIGFBP-1, rmlIGFBP-2, rmlIGFBP-3, rhIGFBP-4, rmlIGFBP-6 or rhIGFBP-7.

Applications

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse IGFBP-1. The detection limit for rmlIGFBP-1 is approximately 2 ng/well.

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

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

