

ORDERING INFORMATION

Catalog Number: BAF5055

Lot Number: CBKA01

Size: $50 \mu g$

Formulation: 0.2 µm filtered solution in PBS

with BSA

Storage: -20 $^{\circ}$ C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human MDGA1

Immunogen: NS0-derived rhMDGA1

(aa 19 - 931)

Ig Type: sheep IgG

Application: Western blot

Biotinylated Anti-human MDGA1 Antibody

Background

MDGA1 (MAM domain-containing GPI anchor protein 1) is a 135 - 140 kDa, novel member of the Ig-superfamily. It is expressed on embryonic neurons destined for cortical layers 2/3, as well as migrating basilar pontine neurons and D1 interneurons of the spinal cord. Human proMDGA1 is 937 amino acids (aa) in length. It is a GPI-linked glycoprotein that contains six consecutive Ig-like domains (aa 24 - 631), followed by one fibronectin type III domain (aa 640 - 739), a MAM region (aa 751 - 918) and a cleavable propeptide (aa 933 - 955). There are at least three potential variants. One shows a 48 aa substitution for aa 936 - 955, a second shows a 58 aa substitution for aa 847 - 955 and a third shows a 51 aa substitution for aa 537 - 955. Over aa 19 - 931, human MDGA1 is 95% aa identical to mouse MDGA1.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human MDGA1 (rhMDGA1; aa 19 - 931; Accession # Q8NFP4). Human MDGA1 specific IgG was purified by human MDGA1 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 μ m filtered solution in phosphate-buffered saline (PBS) containing 50 μ g of bovine serum albumin (BSA) per 1 μ g of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 $\mu g/mL$.

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 has been selected for use as a detection antibody in human MDGA1 Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 μ g/mL with the appropriate secondary reagents to detect human MDGA1. The detection limit for rhMDGA1 is approximately 10 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 10% cross-reactivity with rhMDGA2.

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