

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MDGA2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human MDGA1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MDGA2 Gln21-Asp931 Accession # Q7Z553
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

MDGA2 (MAM domain-containing glycosylphosphatidylinositol anchor protein 2; also named MAMDC1) is a 130 kDa member of the Ig superfamily of proteins (1). Human MDGA2 is synthesized as a 956 amino acid (aa) precursor that contains a 25 aa signal sequence, a 906 aa mature chain, and a 25 aa propeptide. The mature chain consists of six Ig-like domains, followed by a MAM domain (aa 746-921) and a GPI anchor. In addition, there are eight potential sites for N-linked glycosylation. Mature human MDGA2 shares 98% aa sequence identity with mature mouse and rat MDGA2. MDGA2 is structurally similar to other IgCAMS, such as the L1 family and axonin 1, which have roles in cell adhesion, migration, and process outgrowth (2). Northern blot analysis shows MDGA2 expression is limited to the central and peripheral nervous system (1). Within the brain, moderate expression is observed in the cerebral cortex, the hindbrain, the basilar pons, the neocortex, the hippocampus, the amygdala, olfactory bulb, and selected nuclei of the thalamus (1). The similarity of MDGA2 to other Ig-containing molecules, and its temporal-spatial patterns of expression within restricted neuronal populations, suggest a role for MDGA2 in regulating neuronal migration, as well as other aspects of neural development, including axon guidance (1). One study shows that MDGA2 gene is implicated in neuroticism (3).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.