

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Meteorin in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG _{2B} Clone # 347505
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Meteorin isoform 1 Gly22-Asp291 Accession # Q8C1Q4
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.
Immunocytochemistry	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

Meteorin, named after meteors because this protein can transform glial cells into cells with elongated tails, is a 30 kDa member of the Meteorin family (1). The secreted protein is also known as glial cell differentiation factor and hypoxia/reoxygenation regulatory factor. Mouse Meteorin is synthesized as a 291 amino acid (aa) precursor with a 21 aa signal sequence and a 270 aa mature chain. Alternative splicing produces two isoforms. Isoform 2 is missing residues 1-164 found in isomer 1, and has a two aa substitution for aa 165-166. Mouse Meteorin shares 81% aa identity with human Meteorin (2). Meteorin is expressed in the central nervous system both during development and in adult mice (2). During development, Meteorin mRNA appears both in the central and peripheral nervous systems with the most prominent levels in neural progenitors, glial progenitors, and cells of the astrocyte lineage. In the adult mouse, Meteorin is detected only in the brain (2). Within the brain, the most prominent expression is found in the cerebellum where it is expressed by glial cells interspersed between Purkinje neurons (2). Meteorin is also detectable in several discrete neuronal populations, such as the superior colliculus, the ocular motor nucleus, the raphe and pontine nuclei, and various thalamic nuclei (2). Functionally, Meteorin plays important roles in both glial cell differentiation and axonal network formation during neurogenesis (1). In addition, when Meteorin is expressed and secreted by perivascular astrocytes, it upregulates thrombospondin-1/-2 to attenuate angiogenesis in the surrounding endothelial cells and to promote vascular maturation (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.