

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Glypican 2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human Glypican 2, 3, 6, or recombinant mouse Glypican 5 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 300712
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Glypican 2 Lys27-Leu554 Accession # Q8BKV1
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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

The glypicans (GPC) constitute a family of heparan sulfate proteoglycans that are attached to the cell surface by a glycosylphosphatidylinositol (GPI) anchor. Six members of this family have been identified in mammals (GPC1-GPC6). All glypican core proteins contain an N-terminal signal peptide, a large globular cysteine-rich domain (CRD) with 14 invariant cysteine residues, a stalk-like region containing the heparan sulfate attachment sites, and a C-terminal GPI attachment site. Based on the degree of their amino acid sequence similarity, two subfamilies of glypicans have been defined. One subfamily (sharing from 35-63% sequence homology) includes GPC1, 2, 4, and 6, while the second subfamily (sharing 54% sequence identity) includes GPC3 and 5. Proteins between the two subfamilies also share 17-25% sequence similarity (1-4). Glypicans are widely expressed in adult and fetal tissues. During embryonic development, the expression level of the various glypicans changes in a stage and tissue specific manner. GPC2, also known as cerebroglycan, is primarily expressed in developing neuronal tissues including the brain, spinal cord, dorsal root ganglia, and cranial nerves. It is found on the tracts of actively growing axons (5). Cell surface GPC2 binds midkine, indicating midkine-GPC2 interaction may participate in neuronal cell migration and neurite outgrowth (6).

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.