

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Brorin in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse Brorin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Brorin/VWC2 Ser28-Met325 Accession # Q2TAL6
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.
Immunohistochemistry	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

Brorin (brain-specific chordin-like protein), also called VWC2, is an ~46 kDa glycoprotein that is a member of the Chordin family of secreted BMP regulators (1-3). The human Brorin cDNA encodes 325 amino acids (aa) including a 27 aa signal sequence and a 298 aa secreted mature protein with two VWFC domains. These domains contain a pattern of 10 cysteine residues that is conserved in other family members, with the remaining aa sequence sharing little identity (1). Human Brorin shares 90%, 91%, and 95% aa sequence identity with mouse, rat, and equine Brorin, respectively. It also shares aa identity with VWC2L (Brorin-like) of 37% overall and 62% within the VWFC domains (4). Brorin is predominantly expressed in embryonic and adult neural tissues in the mouse (1). Expression of Brorin mRNA is concentrated in neurons within the diencephalon and medulla oblongata but is not detected in the developing cerebral cortex (1). Brorin binds and antagonizes BMPs, interacting via the VWFC domains (1-3). It promotes neurogenesis in mouse neural precursors (1). Knockdown of Brorin in zebrafish embryos results in morphological abnormalities in the brain and eye (1, 4).

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.