

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Ezrin in direct ELISAs and detects human, mouse, and rat Ezrin in Western blots.
Source	Monoclonal Rabbit IgG Clone # 2086C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Ezrin Lys438-Arg562 Accession # P15311
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	HeLa human cervical epithelial carcinoma cell line fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

EZRIN (also Cytovillin, Villin2 and p81) is a founding member of the ERM family, Band 4.1 Superfamily of proteins. Although its predicted MW is 69 kDa, it runs anomalously at 77-82 kDa in SDS-PAGE. ERZIN is expressed by epithelial cells where it serves as a linker between the cell membrane and the actin cytoskeleton. Its presence is particularly strong in microvilli where it helps organize this structure. In addition, ERZIN also organizes microtubules in lymphocytes at or near the immunological synapse by interacting with Glg1. Human EZRIN is 585 amino acids (aa) in length. It contains a band 4.1 homology/FERM domain that binds CD44, ICAM-1, EBP50 and ERM family members (aa 1-295), a central α-helical region (aa 296-352), and a C-terminal ERM and actin-binding/FERM C domain (aa 353-586). EZRIN exists as either a monomer, or a homo/heterodimer. EZRIN is not constitutively active, but must be phosphorylated and unfolded to bind to cytoplasmic proteins. Over aa 438-562, human EZRIN shares 96% aa identity with mouse EZRIN.

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.