

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD155/PVR in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 300903
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD155/PVR Gly27-Asn343 Accession # ABM85069
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

CD155 [also known as PVR (poliovirus receptor) and Nectin-5 (nectin-like molecule-5)] is a 70 kDa type I transmembrane (TM) glycoprotein that is a member of the nectin-like (Nectin) family of nectin-related molecules (1). Like nectins, Nectin molecules are Ig superfamily members that contain three Ig-like extracellular domains, a TM segment, and a cytoplasmic tail. Unlike nectins, Nectin molecules cannot interact with cytoplasmic afadin (1). While Nectins serve as cell adhesion molecules, the actual functions of most Nectins are yet-to-be determined. CD155/PVR was originally isolated based on its ability to mediate polio virus attachment to host cells (2, 3). The full-length (or CD155α isoform) is synthesized as a 417 amino acid (aa) precursor that contains a 20 aa signal sequence, a 323 aa extracellular region, a 24 aa TM segment and a 50 aa cytoplasmic tail. The extracellular region contains one N-terminal V-type and two C2-type Ig-like domains (2, 3). The V-type domain mediates polio virus binding (4). Three other isoforms exist, all of which retain the Ig-like domains. CD155δ is transmembrane with a shortened cytoplasmic tail of 25 aa. CD155β (352 aa) and CD155γ (344 aa) are 60-65 kDa soluble forms that show removal of the TM segment and surrounding amino acids (2, 5). The soluble forms will bind the polio virus (due to the presence of the V-type Ig domain) but afford no protection against polio infection because of low circulating levels (5). CD155 has been demonstrated to bind vitronectin, nectin-3, and DNAM-1 (6-8). DNAM-1 binding promotes monocyte migration and NK cell killing. CD155 is expressed in all normal tissues and is highly expressed in tumor cells of epithelial and neuronal origin.

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.