DESCRIPTION

Species Reactivity  Human
Specificity Detects human CD155/PVR in direct ELISAs and Western blots.
Source Monoclonal Mouse IgG<sub>1</sub> Clone # 300907
Purification Protein A or G purified from hybridoma culture supernatant
Immunogen Mouse myeloma cell line NS0-derived recombinant human CD155/PVR
Gly27-Asn343
Accession # AAH15542
Conjugate Phycoerythrin
Excitation Wavelength: 488 nm
Emission Wavelength: 565-605 nm
Formulation Supplied 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.

<table>
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<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<td>Flow Cytometry 10 µL/10&lt;sup&gt;6&lt;/sup&gt; cells</td>
<td>See Below</td>
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DATA

Flow Cytometry

Detection of CD155/PVR in U937 Human Cell Line by Flow Cytometry. U937 human histiocytic lymphoma cell line was stained with Mouse Anti-Human CD155/PVR PE-conjugated Monoclonal Antibody (Catalog # FAB25301P, filled histogram) or isotype control antibody (Catalog # IC002P, open histogram). View our protocol for Staining Membrane-associated Proteins.

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.
CD155 (also known as PVR (poliovirus receptor) and Necl-5 (nectin-like molecule-5)) is a 70 kDa type I transmembrane (TM) glycoprotein that is a member of the nectin-like (Necl) family of nectin-related molecules (1). Like nectins, Necl molecules are Ig superfamily members that contain three Ig-like extracellular domains, a TM segment, and a cytoplasmic tail. Unlike nectins, Necl molecules cannot interact with cytoplasmic afadin (1). While Nectins serve as cell adhesion molecules, the actual functions of most Necls 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.

References: