

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse PVRIG in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 969102
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human PVRIG synthetic peptide Accession # Q6DK17
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

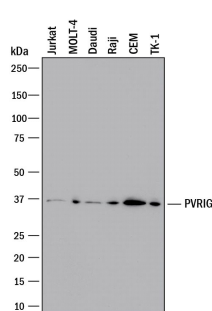
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

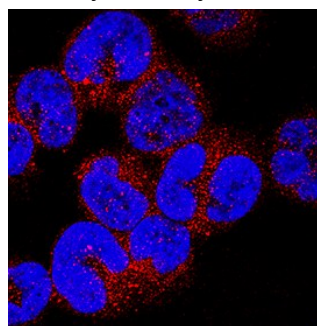
DATA

Western Blot



Detection of Human and Mouse PVRIG by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, MOLT-4 human acute lymphoblastic leukemia cell line, Daudi human Burkitt's lymphoma cell line, Raji human Burkitt's lymphoma cell line, CEM human T-lymphoblastoid cell line, and TK-1 mouse T cell lymphoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human/Mouse PVRIG Monoclonal Antibody (Catalog # MAB9365) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for PVRIG at approximately 36 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



PVRIG in MOLT-4 Human Cell Line. PVRIG was detected in immersion fixed MOLT-4 human acute lymphoblastic leukemia cell line using Mouse Anti-Human/Mouse PVRIG Monoclonal Antibody (Catalog # MAB9365) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human PVRIG (poliovirus receptor related immunoglobulin domain-containing protein), also known as CD112 receptor (CD112R), is an approximately 34 kDa single transmembrane protein in the poliovirus receptor-like protein (PVR) family (1). It is composed of a single extracellular IgV domain, one transmembrane domain, and a long intracellular domain. The intracellular domain contains two tyrosine residues, one within an ITIM-like motif that is a potential docking site for phosphatases (1). The extracellular domain sequence of human and mouse PVRIG have approximately 65% similarity. The human PVRIG gene is preferentially expressed in lymphocytes, such as T cells and NK cells, but not in monocyte derived dendritic cells (1). PVRIG functions as a cell surface receptor for Nectin-2/CD112, a cell surface protein that is widely expressed on antigen-presenting cells and tumor cells. Disrupting the PVRIG/Nectin-2 interaction enhances human T cell response, suggesting PVRIG is a novel checkpoint for human T cells (1).

References:

1. Zhu, Y., et al. (2016) J. Exp. Med. **213**:167.