

DESCRIPTION

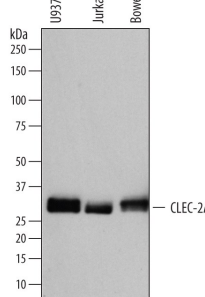
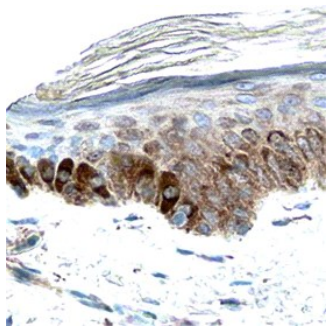
Species Reactivity	Human
Specificity	Detects human CLEC-2A in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) CLEC-2D, rhCLEC-2, or rhCD69 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 705529
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CLEC-2A Trp49-Leu174 (predicted) Accession # Q6UVW9
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	0.5 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human CLEC-2A by Western Blot. Western blot shows lysates of U937 human histiocytic lymphoma cell line, Jurkat human acute T cell leukemia cell line, and Bowes human melanoma cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human CLEC-2A Antigen Affinity-purified Monoclonal Antibody (Catalog # MAB72191) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CLEC-2A at approximately 32 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 1</i>.</p>	<p>Immunohistochemistry</p>  <p>CLEC-2A in Human Skin. CLEC-2A was detected in immersion fixed paraffin-embedded sections of human skin using Mouse Anti-Human CLEC-2A Antigen Affinity-purified Monoclonal Antibody (Catalog # MAB72191) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in keratinocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

CLEC-2A (C-type lectin domain family 2 member A), also known as PILAR and KACL, is an approximately 35 kDa type II transmembrane glycoprotein in the C-type lectin superfamily. It contains one C-type lectin domain in its extracellular region. Alternate splicing of human CLEC-2A generates an additional isoform with a substitution of 37 amino acids (aa) at the C-terminus. CLEC-2A is upregulated on antigen-activated CD8+ T cells and enhances T cell proliferation through interactions with CD161. It is also expressed on keratinocytes and binds to NKp65/KLRF2, triggering NK cell activation.