

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CLEC14A in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) CLEC1, rhCLEC2, rhCLEC3B, and rhCLEC10A is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CLEC14A Glu22-Ala397 Accession # Q86T13
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

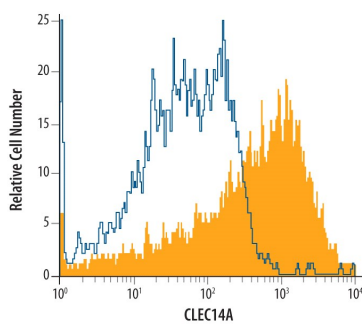
APPLICATIONS

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	0.1 µg/mL	Recombinant Human CLEC14A
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

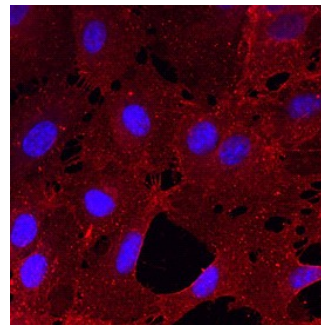
DATA

Flow Cytometry



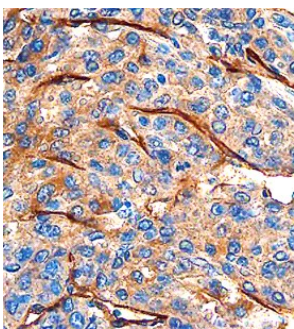
Detection of Clec-14A in HUVEC Human Cells by Flow Cytometry. HUVEC human umbilical vein endothelial cells were stained with Sheep Anti-Human CLEC14A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4968, filled histogram) or isotype control antibody (Catalog # 5-001-A, open histogram), followed by Phycoerythrin-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # F0126).

Immunocytochemistry



CLEC14A in HUVEC Human Cells. CLEC14A was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Sheep Anti-Human CLEC14A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4968) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



CLEC14A in Human Breast Cancer Tissue. CLEC14A was detected in formalin fixed paraffin-embedded sections of human breast cancer tissue using Sheep Anti-Human CLEC14A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4968) at 1.7 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Universal (Catalog # CTS015). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

CLEC14A (C-type lectin domain family 14 member A; also EGFR5) is a 51 kDa (predicted) member of the C-type lectin domain family of proteins. It is a type I transmembrane protein, apparently expressed in brain and about which little is known. Mature human CLEC14A is 469 amino acids in length. It contains a 376 aa extracellular region (aa 22-397) and a 72 aa cytoplasmic domain. The extracellular region shows one C-type lectin like domain (aa 32-175) and an EGF-like region (aa 245-287). Over aa 22-397, human CLEC14A shares 66% and 81% aa identity with mouse and canine CLEC14A, respectively.