abcam

Product datasheet

Anti-CD22 antibody [BLCAM/1796] ab223801

4 Images

Overview

Product name	Anti-CD22 antibody [BLCAM/1796]
Description	Mouse monoclonal [BLCAM/1796] to CD22
Host species	Mouse
Tested applications	**Suitable for:** ICC, Flow Cyt, WB, Protein Array
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human CD22 aa 52-178. The exact sequence is proprietary. Database link: **P20273**
Positive control	ICC and Flow Cyt: Ramos cells; WB: Raji cell lysate.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, PBS
Purity	Protein A/G purified
Purification notes	ab223801 was purified from bioreactor concentrate by Protein A/G.
Clonality	Monoclonal
Clone number	BLCAM/1796
Isotype	IgG1
Light chain type	kappa

Applications

Our **Abpromise guarantee** covers the use of ab223801 in the following tested applications.
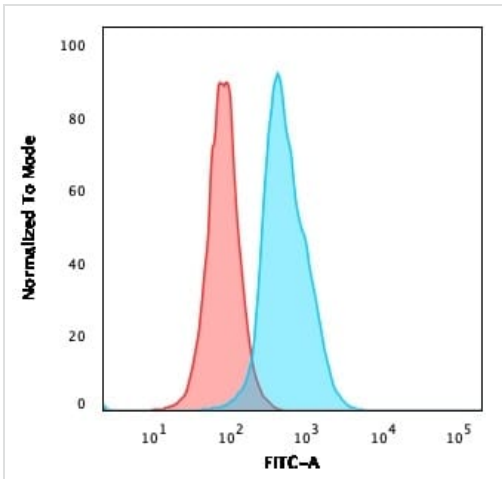
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

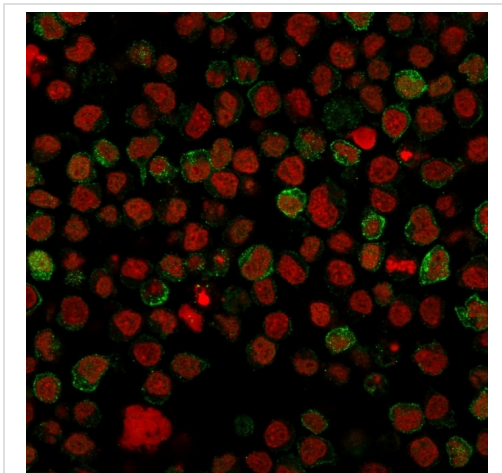| Application	Abreviews	Notes
ICC		Use a concentration of 1 - 2 µg/ml.
Flow Cyt		Use 1-2µg for 10^6 cells.
WB		Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 130-140 kDa (predicted molecular weight: 95 kDa).
Protein Array		Use at an assay dependent concentration.

Target

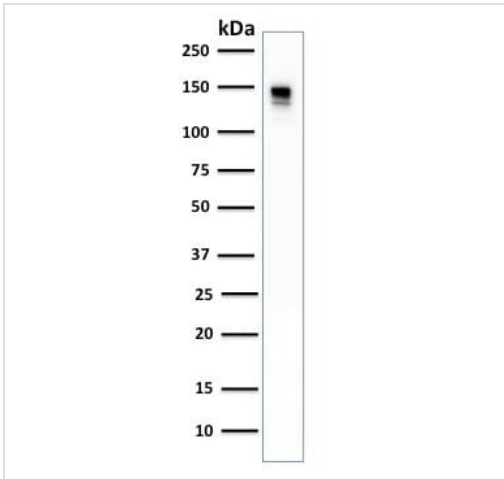|	
Function	Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.
Tissue specificity	B-lymphocytes.
Sequence similarities	Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family. Contains 6 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Domain	Contains 4 copies of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.
Post-translational modifications	Phosphorylation of Tyr-762, Tyr-807 and Tyr-822 are involved in binding to SYK, GRB2 and SYK, respectively. Phosphorylation of Tyr-842 is involved in binding to SYK, PLCG2 and PIK3R1/PIK3R2. Phosphorylated on tyrosine residues by LYN.
Cellular localization	Cell membrane.

Images

Flow Cytometry - Anti-CD22 antibody [BLCAM/1796] (ab223801)

Flow Cytometry analysis of Ramos (human Burkitt's lymphoma cell line) cells labeling CD22 with ab223801 at 2 µg/10^6 cells followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Immunocytochemistry - Anti-CD22 antibody [BLCAM/1796] (ab223801)

Immunocytochemistry analysis of paraformaldehyde-fixed Ramos (human Burkitt's lymphoma cell line) cells labeling CD22 with ab223801 at 2 µg/mL followed by goat anti-Mouse IgG-CF488 (Green). Nuclei are labeled with Reddot (Red).
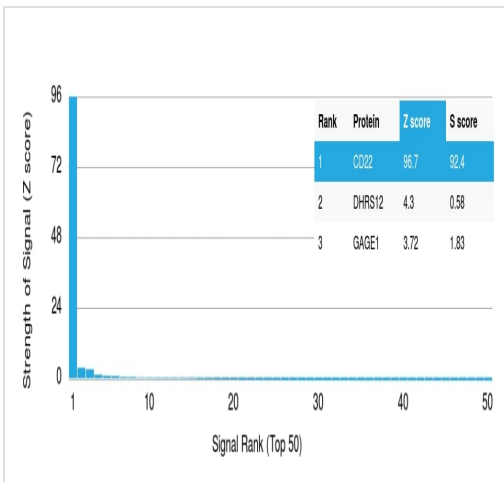
Anti-CD22 antibody [BLCAM/1796] (ab223801) at 2 µg/ml + Raji (human Burkitt's lymphoma cell line) whole cell lysate

Predicted band size: 95 kDa
Observed band size: 140 kDa

ab223801 recognizes a protein of 130-140kDa, identified as CD22.

Western blot - Anti-CD22 antibody [BLCAM/1796] (ab223801)

ab223801 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Protein Array - Anti-CD22 antibody [BLCAM/1796] (ab223801)

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