

Anti-CD20 [NCD1.2 (scFv-3)] Standard Size Ab03144-201.1

This chimeric dog antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Dog IgG2 (IgG-B), Kappa

Clone Number: NCD1.2 (scFv-3)

Alternative Name(s) of Target: Bp35; Leu-16; MS4A1; Leukocyte surface antigen Leu-16; B-lymphocyte antigen CD20; B-lymphocyte surface antigen B1; Membrane-spanning 4-domains subfamily A member 1

UniProt Accession Number of Target Protein: Q3C2E2; P11836

Published Application(s): WB, FC, IF, IHC

Published Species Reactivity: Dog, Human

Immunogen: The original antibody was generated by immunizing 5–8 weeks old BALB/c mice with a canine CD20 peptide (NCDPANPSEKNSLSIQYCGS) at a final concentration of 100 µg/ml in complete Freud's adjuvant.

Specificity: This antibody is specific for the amino acid sequence 'PSEKNSLSI' of dog CD20. It also cross reacts with human CD20. CD20 is a 33kDa tetraspanning transmembrane phosphoprotein which is expressed in pre B-cells. This B-lymphocyte-specific membrane protein plays a role in the regulation of cellular calcium influx necessary for the development, differentiation, and activation of B-lymphocytes. It also functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the B-cell receptor/BCR.

Application Notes: The original IgG antibody binds biotinylated canine CD20 peptide with an relative affinity of $k_d = 340$ pM. This antibody was able to recognize endogenous canine CD20 protein in canine 3132 lymphoma cells and also cross reacted with transfected human GFP-CD20 expression construct in H1299 cells in an western blot assay. This antibody can detect canine CD20 expressed on normal peripheral blood, medium-sized B-cell lymphoma and diffuse large B-cell lymphoma in a flow cytometric assay. It could not detect CD20 -negative peripheral T-cell lymphoma cells in flow cytometry. This antibody was also used in the immunohistochemical staining of formalin fixed samples of diffuse large B-cell lymphoma and lymphoma histotypes of B-cell origin, including marginal zone lymphoma, follicular lymphoma, and small lymphocytic lymphoma. (PMID: 26894679)

Antibody First Published in: Jain et al. The Development of a Recombinant scFv Monoclonal Antibody Targeting Canine CD20 for Use in Comparative Medicine. PLoS One. 2016; 11(2): e0148366. [PMID:26894679](#)

Note on publication: Describes the development and characterization of a recombinant anti-canine CD20

scFv antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.