Anti-CD32b [NOV1216] Standard Size Ab03966-10.29

This is a Fab fragment with His tag.

Isotype and Format: Human Fab fragment, His-Tagged, Lambda
Clone Number: NOV1216
Alternative Name(s) of Target: CD32; Low affinity immunoglobulin gamma Fc region receptor II-b; IgG Fc receptor II-b; CDw32; Fc-gamma RII-b; Fc-gamma-RIIb; FcRII-b; human FCGR2B
UniProt Accession Number of Target Protein: P31994
Published Application(s): in vitro, in vivo, ELISA, FC
Published Species Reactivity: Human
Immunogen: The original antibody was isolated from a human combinatorial antibody library by panning against biotinylated human CD32b.
Specificity: The antibody specifically binds to CD32b. The antibody mainly recognizes epitope I (i.e. the Fc binding domain area). The antibody does not cross reacts with human CD32a-R.
Application Notes: The specificity of the antibody for CD32b was determined by ELISA analysis. The antibody was able to bind to CD32b expressed on human B cells by flow cytometry analysis (binding affinity 1.4 nM). The binding the antibody to the BJAB cell line was evaluated by flow cytometry (binding affinity = 2.4 nM). The antibody bound to CHO cells expressing huCD32b by flow cytometry analysis.The human IgG1 format of the antibody was evaluated for its activity in a primary NK cell based antibody-dependent cell-mediated cytotoxicity (ADCC) assay. The antibody demonstrated concentration dependent specific cell lysis of both cancer cell lines evaluated (Jeko-1 and Karpas422 Cancer Cell). The antibody showed a dose dependent in vivo efficacy in mice bearing established Daudi Xenografts. The ability of Fc WT, Fc enhanced and Fc silent versions of the antibody to bind CD32b positive target cells (such as DAUDI, ATCC CCL-213 and Jeko-1, DSMZ ACC533) and subsequently activate CD16a on Jurkat-NFAT v158 reporter cells was evaluated by the Jurkat-NFAT reporter assay. The Fc WT and the Fc enhanced versions yielded to CD16a activation. The Fc Silent version of the antibody enhanced CD16a activation by rituximab and obinutuzumab when CD32b and CD20 are co-expressed on the same target cells. The enhancement is believed to be due to blocking of CD32b binding to the Fc portion of rituximab and obinutuzumab (US20170198040A1).
Antibody First Published in: PMID:
Note on publication:

Product Form

Size: 100 µg Purified antibody.
Purification: Purified by Immobilized Metal Affinity Chromatography
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.