



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Anti-CD16 [NM3E2] Standard Size Ab03426-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This full-length reformatted human antibody was made using the variable domain sequences of the original Human scFv format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Lambda

**Clone Number:** NM3E2

**Alternative Name(s) of Target:** CD16a; CD16b; FCGR3; FCGR3A; FCGR3B; FcγRIII; Fc-gamma RIII-alpha; Fc-gamma RIII; Fc-gamma RIIIa; FcRIII; FcRIIIa; FcR-10; IgG Fc receptor III-2; Fc-gamma RIII-beta; Fc-gamma RIIIb; FcRIIIb; Low affinity immunoglobulin gamma Fc region receptor III; Low affinity immunoglobulin gamma Fc region receptor III-A; Low affinity immunoglobulin gamma Fc region receptor III-B

**UniProt Accession Number of Target Protein:** P08637

**Published Application(s):** ELISA, FC

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was isolated from a human scFv phage display library by panning against human CD16.

**Specificity:** This antibody binds the extracellular domain of human CD16. This antibody recognizes an epitope in the vicinity of the Fc binding pocket. CD16, also known as FcγRIII, is a cluster of differentiation molecule found on the surface of natural killer cells, neutrophils, monocytes, macrophages, and certain T cells. CD16 has been identified as Fc receptors FcγRIIIa (CD16a) and FcγRIIIb (CD16b), which participate in signal transduction.

**Application Notes:** This antibody is recommended for use in the generation of bispecific antibodies. The binding affinity of this antibody to human CD16 was determined using ELISA and surface plasmon resonance. The original scFv antibody binds human CD16 with an affinity of  $K_d = 0.2$  nM. This antibody in combination with anti-HER2 antibody C6.5 was used in the generation of a bispecific antibody bsAb 2B1, which targets the extracellular domains (ECD) of the HER2/neu protooncogene product and the human FcγRIII or CD16. In the presence of the C6.5 x NM3E2 bs-scFv, peripheral blood lymphocytes promoted significant lysis of human SK-OV-3 ovarian cancer cells overexpressing HER2/neu (PMID:10449096). This antibody was also used in the generation of a heterodimeric bispecific scFv antibodies against EpCAM and CD16. This bispecific antibody was reported to enhance the killing of human carcinomas of the prostate, breast, colon, head, and neck even at very low effector: target ratios (PMID:

23611188).

**Antibody First Published in:** McCall et al. Isolation and characterization of an anti-CD16 single-chain Fv fragment and construction of an anti-HER2/neu/anti-CD16 bispecific scFv that triggers CD16-dependent tumor cytotoxicity. Mol Immunol. 1999 May;36(7):433-45. [PMID:10449096](#)

**Note on publication:** The paper describes the isolation, characterization of an anti-CD16 scFv antibody and its use in the generation of a bispecific 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.