



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

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Anti-EpCAM [3-171] Standard Size Ab02662-10.29

This is a Fab fragment with His tag.

This reformatted human antibody was made using the variable domain sequences of the original Human IgG1 format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Human Fab fragment, His-Tagged, Kappa

Clone Number: 3-171

Alternative Name(s) of Target: CD326; Ep-CAM; KS1/4 antigen; KSA; Epithelial cell adhesion molecule; Adenocarcinoma-associated antigen; Cell surface glycoprotein Trop-1; Epithelial cell surface antigen; Epithelial glycoprotein; EGP; Epithelial glycoprotein 314; 17-1A-antigen; EGP314; hEGP314; Major gastrointestinal tumor-associated protein GA733-2; Tumor-associated calcium signal transducer 1; EGP-2; EGP40; KSA; CO17-1A; GA733-2; 3-171

UniProt Accession Number of Target Protein: P16422

Published Application(s): ELISA, FC, IHC

Published Species Reactivity: Human, Cynomolgus Monkey

Immunogen: The original antibody was generated from a human naïve scFv phage display library and later on made into a human IgG1 isotype format.

Specificity: This antibody binds human EpCAM. It also cross reacts with cynomolgus monkey EpCAM.

Application Notes: The antibody specifically interacts with the naturally EpCAM+Kato III cell line by flow cytometric analysis. The IgG format of the antibody bound to both human and cynomolgus EpCAM under non-reducing conditions in western blot analysis. In contrast, no binding of the antibody was observed to any reduced EpCAM antigen. Further, ELISA data demonstrated good binding of the scFv and IgG formats of the antibody to both human and cynomolgus EpCAM. The binding affinity of the IgG1 format to human and monkey EpCAM was measured by surface plasmon resonance ($K_d = 1$ nM and 0.93 nM respectively). The ability of the IgG format of the antibody to induce ADCC was analyzed using three different breast cancer cell lines MDA-MB-231, MDA-453 and BT-474. The results clearly demonstrated that the antibody induced ADCC in all the three cell lines MDA-MB-453, MDA-MB-231 and BT-474 in the presence of human PBMCs. EC50 values were estimated to be 0.08 ng/ml, 15 ng/ml and 0.12 ng/ml for these cell lines, respectively. The achieved maximum killing was 75%, 92% and 61%, respectively. The ability of the IgG version of the antibody to induce complement dependent cytotoxicity (CDC) was analyzed using two cell lines KATO III and MT-3. The results clearly demonstrated that the antibody induced CDC in the cell lines KATO III and MT-3 in the presence of human serum ($EC_{50} = 0.28$ ng/ml and 0.38 ng/ml for KATO III and MT-3 cells,

respectively) (US8637017B2). Immunohistochemistry studies of the reactivity of the IgG2A format of the antibody were performed on a panel of normal human tissues. The antibody showed a strong reaction to sloughed cells of esophagus sample, colon cancers, breast cancers, and lung cancers with epithelial origin. The antibody was conjugated to Strepsaporin. PCI of 3-17I-saporin attenuated cellular viability in three different EpCAM-positive cancer cell lines (MCF7, BxPC-3 and WiDr) as measured by MTS assay. Further, PCI of 3-17I-saporin attenuated both proliferation and colony forming ability of EpCAM-positive MCF7 cells (Lund et al., 2014; PMID: 24525727).

Antibody First Published in: Lund et al. The novel EpCAM-targeting monoclonal antibody 3-17I linked to saporin is highly cytotoxic after photochemical internalization in breast, pancreas and colon cancer cell lines. MAbs. Jul-Aug 2014;6(4):1038-50. [PMID:24525727](https://pubmed.ncbi.nlm.nih.gov/24525727/)

Note on publication: Explores the therapeutic potential of this antibody by using 3-17I-saporin conjugate and checking its cytotoxicity after photochemical internalization.

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 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.