Product datasheet

Anti-EpCAM antibody [E144] ab32392

Overview

Product name: Anti-EpCAM antibody [E144]
Description: Rabbit monoclonal [E144] to EpCAM
Host species: Rabbit
Specificity: This antibody is specific for human EpCAM.
Tested applications: Suitable for: WB
Unsuitable for: ICC, ICC/IF, IHC-Fr, IHC-P or IP
Species reactivity: Reacts with: Mouse, Rat, Human
Immunogen: Synthetic peptide within Human EpCAM aa 250 to the C-terminus (C terminal). The exact sequence is proprietary.
Positive control: A431 cell lysate and stomach carcinoma.
General notes:

This product is a recombinant monoclonal antibody, which offers several advantages including:
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production
For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant
Purity: Tissue culture supernatant
**Clonality**  
Monoclonal

**Clone number**  
E144

**Isotype**  
IgG

**Applications**

Our **Abpromise guarantee** covers the use of ab32392 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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**Application notes**  
Is unsuitable for ICC, ICC/IF, IHC-Fr, IHC-P or IP.

**Target**

**Function**  
May act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. Plays a role in embryonic stem cells proliferation and differentiation. Up-regulates the expression of FABP5, MYC and cyclins A and E.

**Tissue specificity**  
Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC). Levels rapidly diminish as soon as ESC’s differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the surface of adenocarcinoma.

**Involvement in disease**  
Defects in EPCAM are the cause of diarrhea type 5 (DIAR5) [MIM:613217]. It is an intractable diarrhea of infancy characterized by villous atrophy and absence of inflammation, with intestinal epithelial cell dysplasia manifesting as focal epithelial tufts in the duodenum and jejunum. Defects in EPCAM are a cause of hereditary non-polyposis colorectal cancer type 8 (HNPCC8) [MIM:613244]. HNPCC is a disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early-onset colorectal carcinoma (CRC) and extra-colonic tumors of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the Western world. Clinically, HNPCC is often divided into two subgroups. Type I is characterized by hereditary predisposition to colorectal cancer, a young age of onset, and carcinoma observed in the proximal colon. Type II is characterized by increased risk for cancers in certain tissues such as the uterus, ovary, breast, stomach, small intestine, skin, and larynx in addition to the colon. Diagnosis of classical HNPCC is based on the Amsterdam criteria: 3 or more relatives affected by colorectal cancer, one a first degree relative of the other two; 2 or more generation affected; 1 or more colorectal cancers presenting before 50 years of age; exclusion of hereditary polyposis syndromes. The term 'suspected HNPCC’ or ‘incomplete HNPCC’ can be used to describe families who do not or only partially fulfill the Amsterdam criteria, but in whom a genetic basis for colon cancer is strongly suspected. Note=HNPCC8 results from heterozygous deletion of 3-prime exons of EPCAM and intergenic regions directly upstream of MSH2, resulting in transcriptional read-through and epigenetic silencing of MSH2 in tissues expressing EPCAM.

**Sequence similarities**  
Belongs to the EPCAM family.  
Contains 1 thyroglobulin type-1 domain.

**Post-translational**  
Hyperglycosylated in carcinoma tissue as compared with autologous normal epithelia.
**modifications**
Glycosylation at Asn-198 is crucial for protein stability.

**Cellular localization**

### Images

![Western blot - Anti-EpCAM antibody [E144] (ab32392)](image)

Anti-EpCAM antibody [E144] (ab32392) at 1/2500 dilution + A431 cell lysate

**Predicted band size:** 39 kDa

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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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