



## Rabbit Anti-EpCAM antibody

SL0593R

<b>Product Name:</b>	EpCAM
<b>Chinese Name:</b>	上皮特异性抗原抗体
<b>Alias:</b>	Epithelial Specific Antigen; ESA; epithelial cell adhesion molecule; Tumor-associated calcium signal transducer 1EPCAM; EGP; KSA; M4S1; MH99; MK-1; 17-1A; CD326 ; EGP-2; EGP34; EGP40; KS1/4; MIC18; MOC31; TROP1;323/A3; CO-17A; Ep-CAM; HEA125; hEGP-2; CO17-1A; GA733-2; TACST-1; TACSTD1; ESA; KSA; M4S1; MK-1; DIAR5; TROP1; EGP314; HNPCC8; EPCAM_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	35kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human EpCAM:53-150/314<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	This gene encodes a carcinoma-associated antigen and is a member of a family that includes at least two type I membrane proteins. This antigen is expressed on most

normal epithelial cells and gastrointestinal carcinomas and functions as a homotypic calcium-independent cell adhesion molecule. The antigen is being used as a target for immunotherapy treatment of human carcinomas. Mutations in this gene result in congenital tufting enteropathy. [provided by RefSeq, Dec 2008]

**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.

**Subunit:**

Monomer. Interacts with phosphorylated CLDN7.

**Subcellular Location:**

Lateral cell membrane; Single-pass type I membrane protein. Cell junction, tight junction. Note=Co-localizes with CLDN7 at the lateral cell membrane and tight junction.

**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.

**Post-translational modifications:**

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

**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.

**Similarity:**

Belongs to the EPCAM family.

Contains 1 thyroglobulin type-1 domain.

**SWISS:**

Q99JW5

**Gene ID:**

4072

**Database links:**

[Entrez Gene: 4072](#) Human

[Entrez Gene: 514039](#) Cow

[Entrez Gene: 17075](#) Mouse

[Entrez Gene: 403163](#) Pig

[Entrez Gene: 171577](#) Rat

[Omim: 185535](#) Human

[SwissProt: Q3T0L5](#) Cow

[SwissProt: P16422](#) Human

[SwissProt: Q99JW5](#) Mouse

[SwissProt: Q75QW1](#) Pig

[SwissProt: O55159](#) Rat

[Unigene: 542050](#) Human

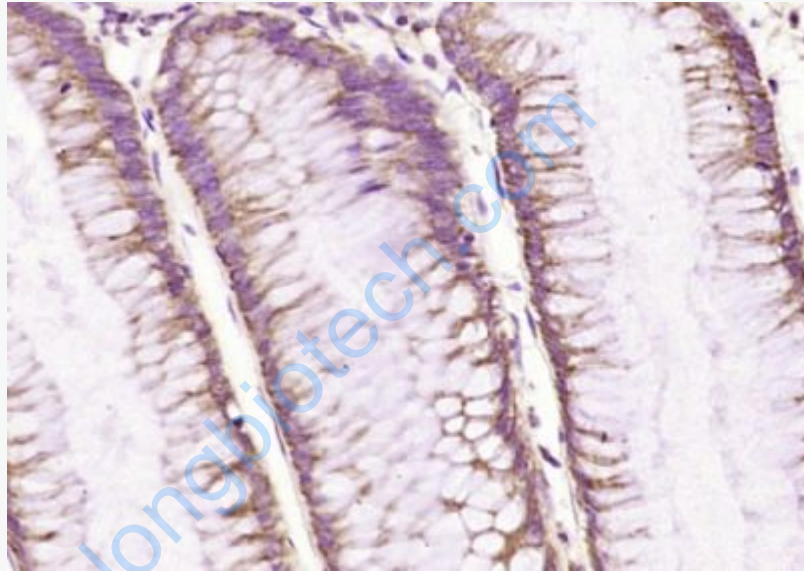
[Unigene: 4259](#) Mouse

[Unigene: 106481](#) Rat

**Important Note:**

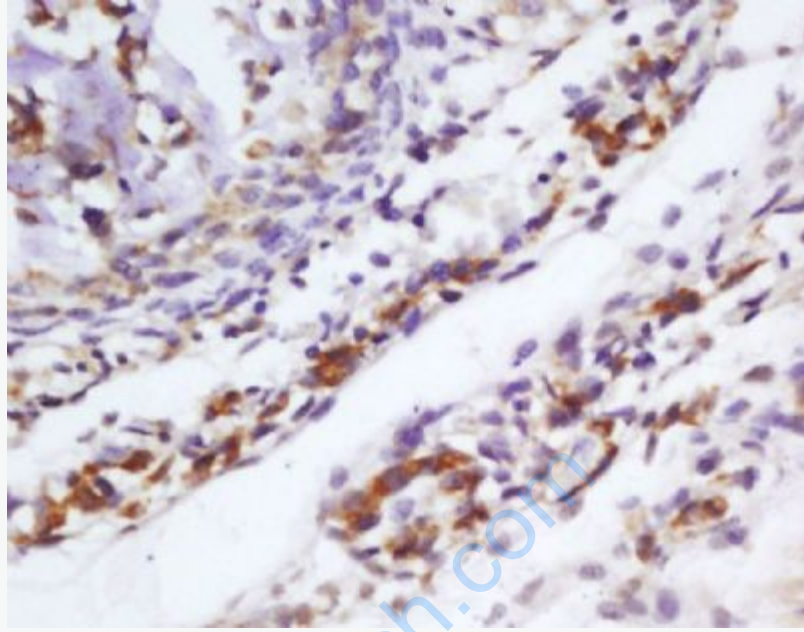
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ESA是分子量为35KDa的细胞表面glycoprotein,属广谱的epithelial cellsMarker,大多数的epithelial cells均为阳性反应,主要用于各种epithelial cells及其来源的Tumour的表达。



**Picture:**

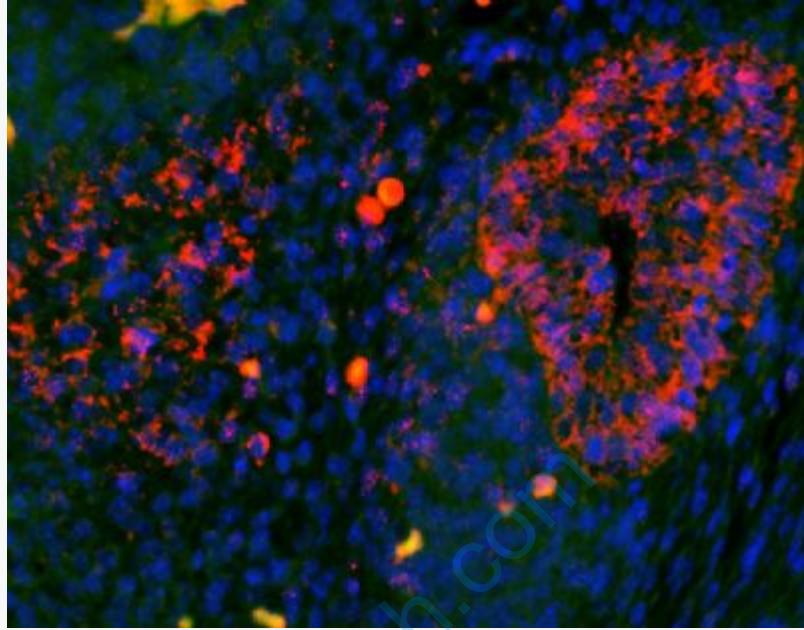
Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EpCAM) Polyclonal Antibody, Unconjugated (SL0593R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-EpCAM Polyclonal Antibody, Unconjugated(SL0593R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



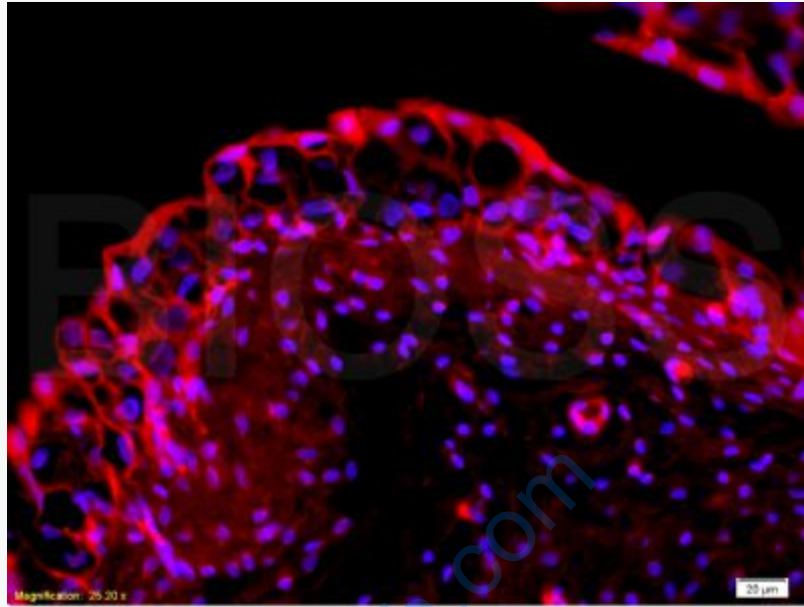
Tissue/cell: mouse embryo tissue;4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-EpCAM Polyclonal Antibody, Unconjugated(SL0593R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL0593R)used at 1:200 dilution for 40 minutes at 37°C.

DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



**bs-0593R Anti-Ep-CAM Polyclonal Antibody**

Tissue/cell: rabbit bladder;4% Paraformaldehyde-fixed and paraffin-embedded

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min

Blocking buffer (normal goat serum) at 37°C for 20 min

Incubation: Anti-Ep-CAM Polyclonal Antibody, Unconjugated(bs-0593R) 1:200, overnight at 4°C,

The secondary antibody was Goat Anti-Rabbit IgG, PE conjugated(bs-0295G-PE)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue) was used to stain the cell nuclei