

Rabbit Anti-E cadherin antibody

SL1519R

Product Name:	E cadherin
Chinese Name:	上皮钙粘附分子抗体
Alias:	E-cadherin; anion exchanger protein 3; Arc 1; Cadherin 1; cadherin 1 type 1 E-cadherin; Cadherin1; CAM 120/80; CD 234; CD324; CD324 antigen; CDH1; CDHE; ECAD; Epithelial cadherin; epithelial calcium dependant adhesion protein; LCAM; Liver cell adhesion molecule; UVO; Uvomorulin; CADH1_HUMAN.
	Specific References(2) SL1519R has been referenced in 2 publications.
	[IF=1.61]Yu, Yang, et al. "RNA interference-mediated knockdown of Notch-1 inhibits
	migration and invasion, down-regulates matrix metalloproteinases and suppresses NF-
文献引用	κB signaling pathway in trophoblast cells." Acta Histochemica (2014). WB; Human.
Pub Med	PubMed:24681113
•	[IF=2.15]Fan, Hai-Xia, et al. "Sonic hedgehog signaling may promote invasion and
	metastasis of oral squamous cell carcinoma by activating MMP-9 and E-cadherin
	expression." Medical Oncology 31.7 (2014): 1-8.IHC-P;Human.
	PubMed:24915900
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
	Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	90/97kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid

Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human E-cadherin:841-882/882 <cytoplasmic></cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a classical cadherin of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature glycoprotein. This calcium-dependent cell-cell adhesion protein is comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function of this gene is thought to contribute to cancer progression by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization. This gene is present in a gene cluster with other members of the cadherin family on chromosome 16. [provided by RefSeq, Nov 2015] Function: Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7. E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production. Subunit: Homodimer. Subcellular Location: Cell junction. Cell membrane; Single-pass type I membrane protein. Tissue Specificity: Non-neural epithelial tissues. Post-translational modifications: During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium

influx, causes disruption of cell-cell adhesion and the subsequent release of beta-catenin into the cytoplasm. The residual membrane-tethered cleavage product is rapidly degraded via an intracellular proteolytic pathway. Cleavage by caspase-3 releases the cytoplasmic tail resulting in disintegration of the actin microfilament system. The gamma-secretase-mediated cleavage promotes disaaaembly of adherens junctions.

DISEASE:

Defects in CDH1 are involved in dysfunction of the cell-cell adhesion system, triggering cancer invasion (gastric, breast, ovary, endometrium and thyroid) and metastasis. Defects in CDH1 are a cause of gastric cancer [MIM:137215]; also known as hereditary familial diffuse gastric cancer (HDGC).

Defects in CDH1 are a cause of susceptibility to endometrial cancer [MIM:608089]. Defects in CDH1 are associated with ovarian cancer [MIM:167000]. Ovarian cancer is the leading cause of death from gynecologic malignancy. It is characterized by advanced presentation with loco-regional dissemination in the peritoneal cavity and the rare incidence of visceral metastases. These typical features relate to the biology of the disease, which is a principal determinant of outcome.

Similarity:

Contains 5 cadherin domains.

SWISS:

P12830

Gene ID:

999

Database links:

Entrez Gene: 999Human

Entrez Gene: 12550Mouse

Entrez Gene: 83502Rat

Omim: 192090Human

SwissProt: P12830Human

SwissProt: P09803Mouse

SwissProt: Q9R0T4Rat

Unigene: 461086Human

Unigene: 35605 Mouse

Unigene: 1303Rat

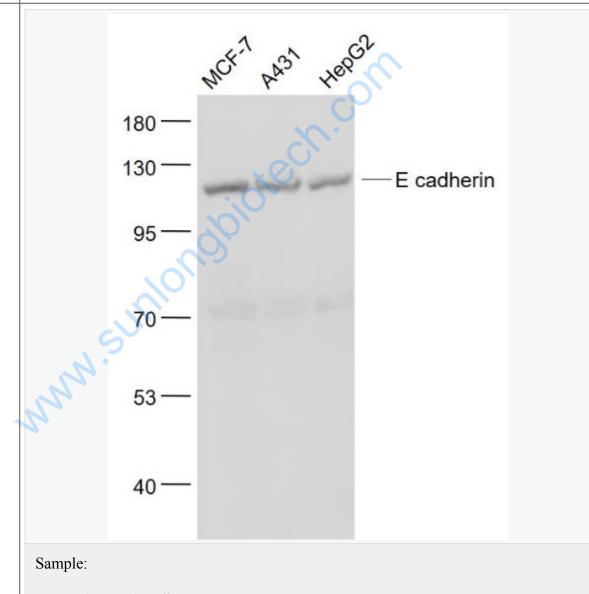
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

细胞粘附蛋白(Call Adhesion Protein)

E-chaherin是研究较多的同质粘附分子。E-

cadherin的表达与恶性Tumour的分化程度、侵袭力、转移负相关与预后正相关,E-cadherin的低表达和不稳定表达可促进转移的发生。近年来已成为Tumour细胞侵袭和转移研究的热点之一。



Picture:

MCF-7(Human) Cell Lysate at 30 ug

A431(Human) Cell Lysate at 30 ug

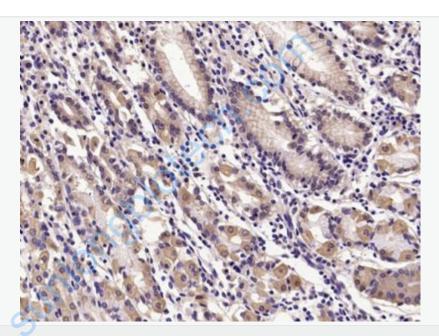
HepG2(Human) Cell Lysate at 30 ug

Primary: Anti- E cadherin (SL1519R) at 1/1000 dilution

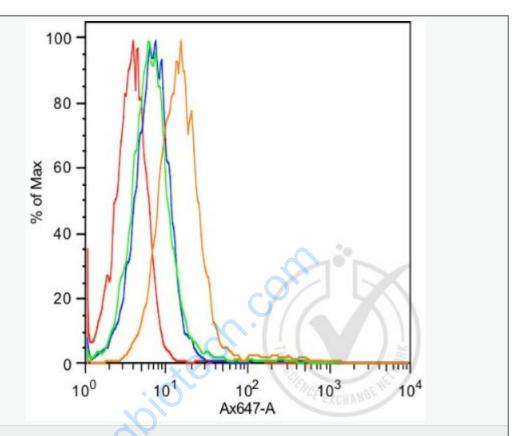
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 90/97 kD

Observed band size: 125 kD



Paraformaldehyde-fixed, paraffin embedded (Human stomach); Antigen retrieval by microwave in sodium citrate buffer (pH6.0); Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (E cadherin) Polyclonal Antibody, Unconjugated (SL1519R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.



Histogram of MCF7 cells stained with anti-E-cadherin (orange), isotype control antibody (green), secondary antibody only (blue) and unstained (red).