For Research Use Only

E-cadherin Polyclonal antibody

Catalog Number:20648-1-AP 6 Publications

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Basic Information

Catalog Number:
20648-1-AP

Size:
200 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_004360

GeneID (NCBI):
999

UNIPROT ID:
P12830

Full Name:
cadherin 1, type 1, E-cadherin (epithelial)

Calculated MW:
97 kDa

Observed MW:
100-125 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:200
IF 1:10-1:100

Applications

Tested Applications:
FC, IF/ICC, IHC, WB,ELISA

Cited Applications:
IF, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : PC-3 cells,

IHC : human colon cancer tissue, human liver cancer tissue

IF : HepG2 cells,

Background Information

E-cadherin (epithelial cadherin), also known as CDH1 (cadherin 1) or CAM 120/80, is a classical member of the cadherin superfamily which also include N-, P-, R-, and B-cadherins. It has been regarded as a marker for spermatogonial stem cells in mice(PMID:23509752). E-cadherin is expressed on the cell surface in most epithelial tissues. The extracellular region of E-cadherin establishes calcium-dependent homophilic trans binding, providing specific interaction with adjacent cells, while the cytoplasmic domain is connected to the actin cytoskeleton through the interaction with p120-, α -, β -, and γ -catenin (plakoglobin). E-cadherin is important in the maintenance of the epithelial integrity, and is involved in mechanisms regulating proliferation, differentiation, and survival of epithelial cell. E-cadherin may also play a role in tumorigenesis. It is considered to be an invasion suppressor protein and its loss is an indicator of high tumor aggressiveness. This antibody is specific to CDH1.

Notable Publications

Author	Pubmed ID	Journal	Application
Wenhua Huang	36293081	Int J Mol Sci	WB
Tianming Liu	26459119	Mol Med Rep	WB
Thankam S Nair	34371293	Tissue Cell	IF

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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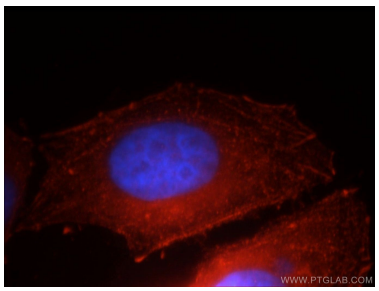
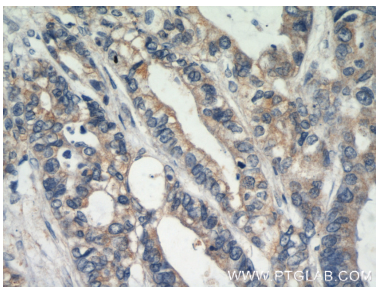
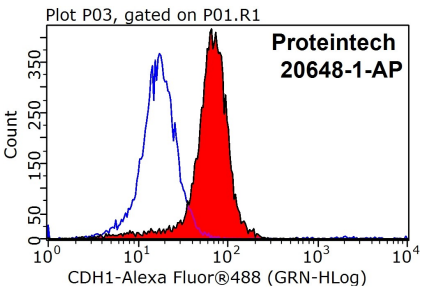
Selected Validation Data



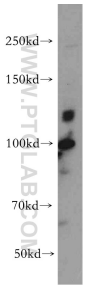
Immunofluorescent analysis of HepG2 cells, using CDH1 antibody 20648-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded human colon cancer using 20648-1-AP (E-cadherin antibody) at dilution of 1:50 (under 40x lens).



1X10^6 HepG2 cells were stained with 0.2ug E-cadherin antibody (20648-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:200.



PC-3 cells were subjected to SDS PAGE followed by western blot with 20648-1-AP (E-cadherin antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.