For Research Use Only

CEA/CD66e Recombinant antibody

Catalog Number:83653-5-RR



Basic Information

Catalog Number: 83653-5-RR

Size:
1000 ug/ml
Source:
Rabbit
Isotype:

GenBank Accession Number:

NM_004363 GeneID (NCBI): 1048 UNIPROT ID: P06731-1

Full Name: carcinoembryonic antigen-related cell adhesion molecule 5

Calculated MW: 77 kDa Observed MW: 200 kDa Purification Method:

Protein A purfication CloneNo.:

240666B12

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:125-1:500

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

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:**

IF/ICC: HT-29 cells,

WB: MCF-7 cells, human saliva IHC: human ovary cancer tissue,

Background Information

Carcinoembryonic antigen (CEA), also known as CEACAM5 or CD66e, is a cell surface glycoprotein belonging to the immunoglobulin superfamily, mainly serving as a cell adhesion molecule mediating intercellular contact by both homophilic and heterophilic binding (PMID: 21731662). CEA inhibits anoikis and plays a role in tumorigenesis and metastasis. CEA has been found to be overexpressed in a wide variety of human cancers, including colon, breast, and lung (PMID: 17167768). CEA is a tumor marker and is routinely exploited for diagnosis. This antibody is raised against 35-685 aa of human CEA/CD66e and can cross-react with CEACAM1/CD66a and CEACAM3/CD66d.

Storage

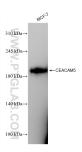
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

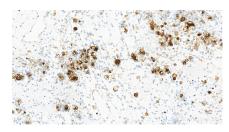
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



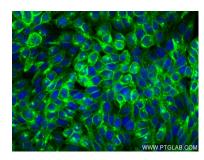
MCF-7 cells were subjected to SDS PAGE followed by western blot with 83653-5-RR (CEA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 burs.



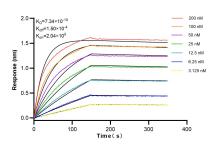
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83653-5-RR (CEA antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83653-5-RR (CEA antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HT-29 cells using CEA antibody (83653-5-RR, Clone: 240666B12) at dilution of 1:250 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLL) kinetic assays of 83653-5-RR against Human CEA were performed. The affinity constant is 0.734 nM.