

For Research Use Only

# CEA/CD66e Recombinant antibody

Catalog Number: 83653-5-RR



## Basic Information

<b>Catalog Number:</b> 83653-5-RR	<b>GenBank Accession Number:</b> NM_004363	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1048	<b>CloneNo.:</b> 240666B12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P06731-1	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> carcinoembryonic antigen-related cell adhesion molecule 5	
	<b>Calculated MW:</b> 77 kDa	
	<b>Observed MW:</b> 200 kDa	

## Applications

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

**Species Specificity:**  
human

**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 :** MCF-7 cells, human saliva  
**IHC :** human ovary cancer tissue,  
**IF/ICC :** HT-29 cells,

## 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**

\*\*\* 20ul sizes contain 0.1% BSA

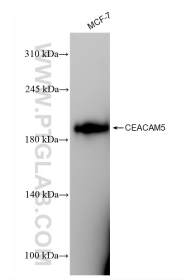
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

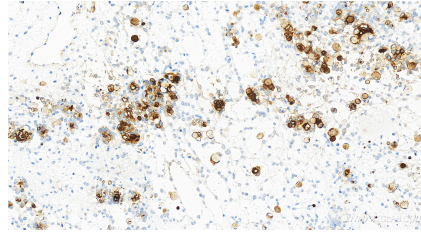
E: proteintech@ptglab.com  
W: ptglab.com

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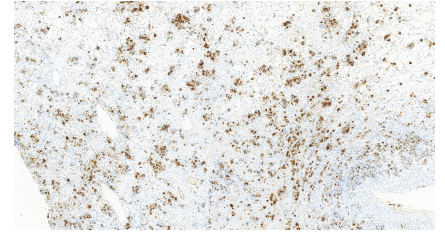
## Selected Validation Data



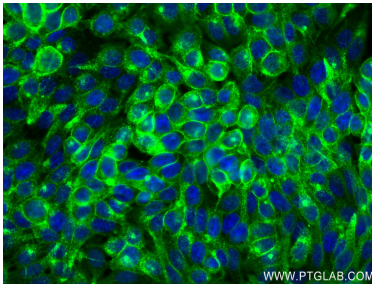
MCF-7 cells were subjected to SDS PAGE followed by western blot with 83653-5-RR (CEA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



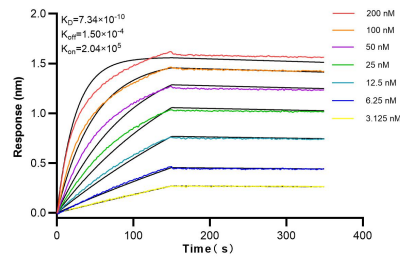
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83653-5-RR (CEA antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded 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 (BLI) kinetic assays of 83653-5-RR against Human CEA were performed. The affinity constant is 0.734 nM.