

**Mouse Anti-CEACAM1/CD66a [28T25]: MC0147, MC0147RTU7**

**Intended Use:** For Research Use Only

**Description:** CEACAM1 (also known as C-CAM and CD66a) is a member of CEA-related cell-adhesion molecule (CEACAM) subfamily of the carcinoembryonic antigen (CEA) family. CEACAM1 is expressed by certain epithelial, endothelial, lymphoid, and myeloid cells. Human CEACAM1 has many different splice variants; the abundance of CEACAM1 and the relative ratio of the different isoforms varies markedly among cell types and may be regulated in a context-dependent fashion. The isoforms with long (L) and short (S) cytoplasmic tails have different signaling properties. Notably, L isoforms contain a functional ITIM (immunoreceptor tyrosine-based inhibitory motif) and several serine and threonine residues that could serve as potential phosphorylation targets. The extracellular domain of CEACAM1 is heavily glycosylated, making its apparent molecular weight during electrophoresis much larger than its predicted size (57.6 kDa). CEACAM1 mediates intercellular adhesion through homo- and heterophilic interaction with other members of the CEACAM family. Studies indicate that CEACAM1 plays important roles in angiogenesis, neovascularization, insulin signaling, T cell signaling, and tumorigenesis. In addition, CEACAM1 can function as a receptor for several microbial pathogens.

**Specifications:**

Clone: 28T25  
Source: Mouse  
Isotype: IgG1  
Reactivity: Human  
Localization: Membrane  
Formulation: Purified antibody in PBS pH7.4, containing BSA, and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, WB  
Package:

Description	Catalog No.	Size
CEACAM1/CD66a Concentrated	MC0147	1 ml
CEACAM1/CD66a Prediluted	MC0147RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Fetal liver or kidney, A549, SW480, and HepG2 cell lysates  
Concentrated Dilution: 10-50  
Pretreatment: citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Expression of the adhesion molecule CEACAM1 (CD66a, BGP, C-CAM) in breast cancer is associated with the expression of the tumor-suppressor genes Rb, Rb2, and p27. Bamberger AM, et al. Virchows Arch. Feb;440(2):139-44, 2002.
2. Expression of CD66a in multiple myeloma. Satoh Y, et al. J Clin Lab Anal. 16(2):79-85, 2002. Expression of biliary glycoprotein (CD66a) in normal and malignant breast epithelial cells. Huang J, et al. Anticancer Res. Sep-Oct;18(5A):3203-12, 1998.
3. CD66a (BGP), an adhesion molecule of the carcinoembryonic antigen family, is expressed in epithelium, endothelium, and myeloid cells in a wide range of normal human tissues. Prall F, et al. J Histochem Cytochem. Jan;44(1):35-41, 1996.