

Product datasheet for AM02001PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CEACAM6 Mouse Monoclonal Antibody [Clone ID: 9A6]

Product data:

Product Type: Primary Antibodies

Clone Name: 9A6

Applications: ELISA, FC, IHC, WB

Recommended Dilution: ELISA:1/200-1/400. Cell based ELISA with intakt, transiently transfected cells: 1/200-1/400.

Western blot: 4 µg/ml.

Flow Cytometry: 1.2 µg/106 cells.

Immunohistology on Cryo-Sections: $1-2 \mu g/106$ cells.

For various aplications see list of References.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Tumor cell lines expressing CEACAM6 (1,2)

Specificity: 9A6 recognizes exclusively CEACAM6 transiently expressed on the cell surface of transfected

BOSC cells (Fig. 1).

9A6 can be used to distinguish CEACAM6 from all other CEACAM and probably all pregnancy-specific glycoproteins molecules, namely CEACAM1 (BGP/CD66a), CEACAM3 (CGM1/CD66d), CEACAM4 (CGM7), CEACAM6 (NCA/CD66c), CEACAM7 (CGM2), CEACAM8 (CGM6/CD66b) and PSG1 (CD66f) based on its reactivity pattern with stable HeLa transfectants expressing individual CEA family members (3 and Fig.1). 9A6 was included and characterized in the

framework of the VIth Leucocyte Typing Workshop.

Formulation: PBS, pH 7.2 without preservatives

State: Purified

State: Liquid purified IgG fraction

Concentration: lot specific

Purification: Affinity Chromatography on Protein G

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.



CEACAM6 Mouse Monoclonal Antibody [Clone ID: 9A6] - AM02001PU-N

Stability: Shelf life: one year from despatch.

Gene Name: carcinoembryonic antigen related cell adhesion molecule 6

Database Link: Entrez Gene 4680 Human

P40199

Background: CEA-related cell adhesion molecule 6 (CEACAM6, NCA) belongs to the carcinoembryonic

antigen (CEA) gene family (13). It encodes a glycosyl phosphatidyl inositol (GPI)-linked glycoprotein with a Mr of 90,000 which is strongly expressed on epithelial cells of the fetal and adult gastrointestinal tract, epithelia of glandular tissues, squamous epithelial cell of the tongue, esophagus and cervix as well as on granulocytes (Fig. 2; Ref. 4, 10). CEACAM6

expression is upregulated in many adenocarcinomas (4) and leukemias (5). Like all members of the CEA family, it consists of a single N domain, with structural homology to the

immunoglobulin variable domains, followed by one immunoglobulin constant-like A and B

domain.

Synonyms: Normal cross-reacting antigen, Non-specific crossreacting antigen, NCA

Product images:

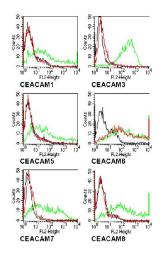


Figure 1: Specificity testing of 9A6. Members of the CEA family were expressed on BOSC cells after transient transfection with expression vectors containing either the cDNA of CEACAM1, 5, 6, 7 or 8. Recognition of CEACAM3 and 4 was tested on stably transfected HeLa (CEACAM3) and CHO cells (CEACAM4). Expression of the constructs was confirmed with monoclonal antibodies known to recognize the corresponding proteins (CEACAM1, 3, 4, 5 and 6: D14HD11; CEACAM7: CAC2; CEACAM8: 80H3; green curves). An irrelevant monoclonal antibody served as a negative control (black curves). For specificity testing, protein G-purified GM-9A6 was tested on all CEACAM transfectants. A positive signal was only obtained with CEACAM6-expressing cells (red curves).



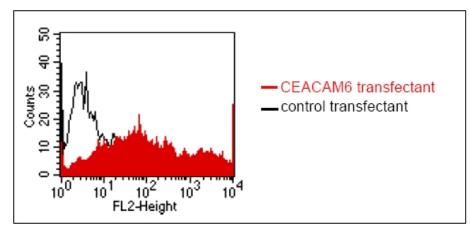


Figure 2: FACS analysis of BOSC23 cells using CEACAM6 antibody Clone 9A6. BOSC23 cells were transiently transfected with an expressionvector encoding either CEACAM6 (red curve) or an irrelevantprotein (control transfectant). Binding of 9A6 was detected with a PE conjugated secondary antibody. A positive signal wasobtained only with CEACAM6 transfected cells.