## Description

| Source | Recombinant Human CEACAM-1/CD66a Protein is expressed from HEK293 with His tag at the C-Terminus. |
| :--- | :--- |
| It contains GIn35-Gly428. |  |
| Accession | P13688-1 |
| Molecular <br> Weight | The protein has a predicted MW of 44.4 kDa . Due to glycosylation, the protein migrates to 68-115 kDa based on <br> Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per $\mu$ g by the LAL method. |
| Purity | $>95 \%$ as determined by Tris-Bis PAGE |
| $995 \%$ as determined by HPLC |  |

## Formulation and Storage

| Formulation | Lyophilized from $0.22 \mu \mathrm{~m}$ filtered solution in $\mathrm{PBS}(\mathrm{pH} 7.4)$. Normally $8 \%$ trehalose is added as protectant before <br> lyophilization. |
| :--- | :--- |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than $100 \mu \mathrm{~g} / \mathrm{ml}$ is recommended. <br> Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to $-80^{\circ} \mathrm{C}$ for 12 months as supplied from date of receipt. $-80^{\circ} \mathrm{C}$ for $3-6$ months after reconstitution. $2-8^{\circ} \mathrm{C}$ for 2- <br> 7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please <br> minimize freeze-thaw cycles. |

## Background

Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM-1) is the major antigen of the CD66 cluster of granulocyte differentiation antigens. The present study aimed to assess the biological function of CEACAM-1 on the growth of human colorectal cancer (CRC) cells in vitro.

## Assay Data

## Tris-Bis PAGE

|  | MK | R |
| :---: | :---: | :---: |
| 140KD | - |  |
| 115KD |  |  |
| 80KD | - |  |
| 70KD | $=$ |  |
| 50KD | $\square$ |  |
| 40KD | - |  |
| 30KD | $\square$ |  |
| 25KD | $=$ |  |
| 15KD | - |  |
| 10KD | - |  |

## SEC-HPLC



Human CEACAM-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95\%.

The purity of Human CEACAM-1 is greater than $95 \%$ as determined by SEC-HPLC.

## Assay Data

## ELISA Data

Human CEACAM-1, His Tag ELISA
$0.05 \mu \mathrm{~g}$ Human CEACAM-1, His Tag Per Well


Log Anti-CEACAM1 Antibody, hFc Tag Conc.( $\mu \mathrm{g} / \mathrm{ml}$ )


Immobilized Human CEACAM-1 at $0.5 \mu \mathrm{~g} / \mathrm{ml}$ ( $100 \mu \mathrm{l} / \mathrm{well}$ ) on the plate. Dose response curve for Anti-CEACAM-1 Antibody, hFc Tag with the EC50 of $3.2 \mathrm{ng} / \mathrm{ml}$ determined by ELISA (QC Test).

Human CEACAM-1, His Tag immobilized on CM5 Chip can bind Human CEACAM-7, His Tag with an affinity constant of $0.37 \mu \mathrm{M}$ as determined in SPR assay (Biacore T200).

