Recombinant Human CEACAM-7

Catalog Number: 9010-CM

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived Thr36-Asn233, with a C-terminal 6-His tag Accession # Q14002
N-terminal Sequence Analysis	Thr36
Predicted Molecular Mass	23 kDa

SPECIFICATIONS

SDS-PAGE	42-52 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human CEACAM-7 is immobilized at 0.1 µg/mL (100 µL/well), the concentration of Recombinant Human CEACAM-1/CD66a (Catalog # 2244-CM) that produces 50% of the optimal binding response is approximately 1.6-8 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Carcinoembryonic antigen-related cell adhesion molecule 7 (CEACAM-7), also known as CGM2, is an approximately 40 kDa GPI-anchored glycoprotein in the CEACAM family of adhesion molecules (1). Mature human CEACAM-7 consists of two Ig-like domains followed by the GPI anchor (2). Alternative splicing generates a short isoform that lacks the second Ig-like domain. CEACAM-7 is preferentially expressed on the luminal surface of epithelial cells near the mouth of colonic crypts and on pancreatic ductal epithelial cells (3, 4). It is down-regulated during colorectal adenoma progression (2-6) but can be up-regulated during the development of gastric carcinoma (7). R&D Systems in-house testing indicates that CEACAM-7 binds to CEACAM-1, consistent with the heterophilic interaction of CEACAM-1 with other CEACAM family members (1, 8, 9).

References:

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