

Cluster Of Differentiation 276 (CD276) Active Protein | CD276 active protein

Active Cluster Of Differentiation 276 (CD276)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA148179	E Coli	Human	Activity Assay, Cell Culture

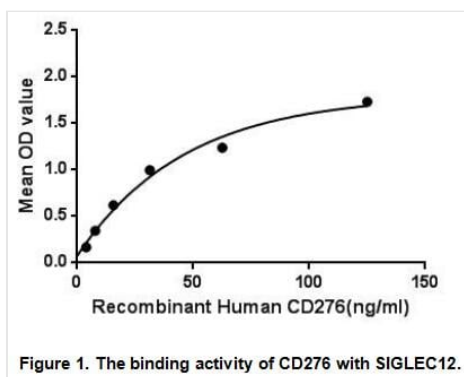
PRODUCT SYNONYMS

Cluster Of Differentiation 276 (CD276); Active Cluster Of Differentiation 276 (CD276); B7-H3; B7H3; CD276 Molecule; B7 homolog 3; Costimulatory molecule; CD276 active protein

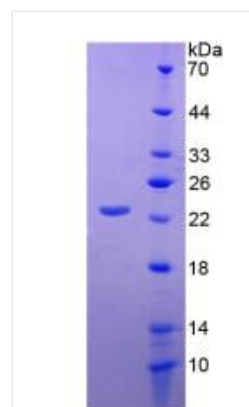
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	534
Applicable Applications for CD276 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Thr47~Ser219
Isoelectric Point	5.9

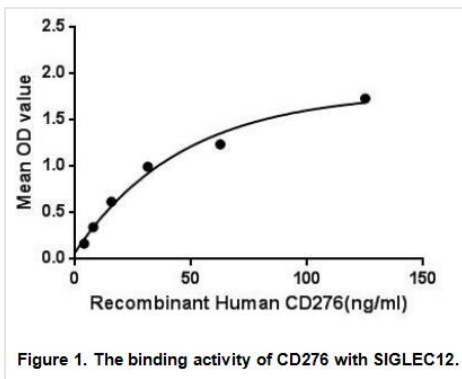
IMAGES



Application Data



SDS-PAGE



Activity

Cluster Of Differentiation 276 (CD276) also known as B7-H3 in human, is a member of the B7/CD28 superfamily of costimulatory molecules serving as an accessory modulator of T-cell response. B7 proteins are immunoglobulin (Ig) superfamily members with extracellular Ig-V-like and Ig-C-like domains and short cytoplasmic domains. Among the family members, they share about 20-40% amino acid (aa) sequence identity. CD276 may play a protective role in tumor cells by inhibiting natural-killer mediated cell lysis as well as a role of marker for detection of neuroblastoma cells. It has also been found to enhance the induction of primary cytotoxic T lymphocytes and stimulate IFN-gamma production. Besides, Sialic acid-binding Ig-like lectin 12 (SIGLEC12) has been identified as an interactor of CD276, thus a binding ELISA assay was conducted to detect the interaction of recombinant human CD276 and recombinant human SIGLEC12. Briefly, CD276 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to SIGLEC12-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CD276 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of CD276 and SIGLEC12 was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for CD276 active protein	CD & Adhesion molecule; Tumor immunity; Autoimmunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	67188443
NCBI GeneID	80381
NCBI Accession #	NP_001019907.1
NCBI GenBank Nucleotide #	NM_001024736.1
UniProt Accession #	Q5ZPR3; Q6P5Y4; Q6UXI2; Q8NBI8; Q8NC34; Q8NCB6; Q9BXR1
Molecular Weight	Predicted Molecular Weight: 22.4kDa Accurate Molecular Weight: 22kDa
NCBI Official Full Name	CD276 antigen isoform a
NCBI Official Synonym Full Names	CD276 molecule
NCBI Official Symbol	CD276
NCBI Official Synonym Symbols	B7H3; B7-H3; B7RP-2; 4lg-B7-H3
NCBI Protein Information	CD276 antigen
UniProt Protein Name	CD276 antigen
UniProt Gene Name	CD276
UniProt Synonym Gene Names	B7H3; B7-H3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-human-active-protein/cluster-of-differentiation-276-cd276/148179>