Active Recombinant Human CD276 Protein, His&Avi tagged

Cat. No. CD276-56H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	2Ig-B7H3 dimer protein contains a 2Ig-B7H3 extracellular domain with a single pair of IgV-like and IgC-like immunoglobulin domains (UniProt# Q5ZPR3-2) fused with a dimer motif followed by a tandem His-Avi tag at the C-terminus.
Species	Human
Source	HEK293T
ProteinLength	29-466 aa
Description	Human B7 Homolog 3 (B7H3, B7-H3) is a member of the B7 family of immune checkpoint proteins involved in regulating immune responses. Human B7H3 has 2 isoforms: 2Ig-B7H3 (2Ig-B7-H3, 2IgB7H3) and 4Ig-B7H3 (4Ig-B7-H3, 4IgB7H3). B7H3 is a Type I membrane protein characterized by an extracellular domain, a transmembrane domain and a cytoplasmic domain. The 2Ig-B7H3 isoform contains a single pair of IgV-like and IgC-like immunoglobulin domains while the 4Ig-B7H3 isoform has two pairs of IgV-like and IgC-like immunoglobulin domains in the extracellular region. B7H3 is also known as B7-H3, Cluster of Differentiation 276 (CD276), and B7RP-2. B7H3 has limited expression on normal tissues but is highly expressed in many cancer cells including lung, kidney, ovarian, colorectal, liver, and breast cancers, which can contribute to immune evasion by inhibiting T cell activation. B7H3 can form a dimer that is critical for its function and can more effectively interact with its receptor(s) on T cells and other immune cells. B7H3 is overexpressed in up to 60% of all cancers and due to its selective expression on

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	solid tumors B7H3 has become a critical target for cancer therapies.
Molecular Mass	67 kDa
Homodimer/Heterodimer	Homodimer
Purity	Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition
Application	Verified Applications: ELISA for 2Ig-B7H3-specific antibody binding assay. Suggested Applications: ELISA for 2Ig-B7H3-specific antibody binding assays. SPR & BLI for 2Ig-B7H3-specific antibody binding assays. Animal immunization, RUO.
Storage	At -80 centigrade
Storage Buffer	0.22μm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice

GENE INFORMATION

Gene ID	80381
Gene Name	CD276 CD276 molecule [Homo sapiens (human)]
Official Symbol	80381
Synonyms	CD276; CD276 molecule; CD276 antigen; B7 H3; B7H3; B7RP 2; B7 homolog 3; costimulatory molecule; B7-H3; B7RP-2; 4Ig-B7-H3;

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mRNA Refseq	NM_001024736
Official Symbol 2	CD276
Gene ID 2	80381
Gene Name 2	CD276 CD276 molecule [Homo sapiens (human)]
mRNA Refseq 2	NM_001024736
Protein Refseq 2	NP_001019907
MIM 2	605715
UniProt ID 2	Q5ZPR3
Bioactivity-Antibody Binding	Immobilized human 2Ig-B7H3-His-Avi dimer protein at 2 μg/mL (100 μL/well) can bind anti-human B7H3 monoclonal antibody with half maximal effective concentration (EC50) range of 8.7-34.8 ng/mL (QC tested).
SDS-PAGE	MW: Molecular Weight marker reduced condition NR: 2Ig-B7H3 dimer under non-reduced condition

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