

Recombinant Human CD276 molecule Protein, His tagged

Cat. No. CD276-271H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human B7-H3 protein (Q5ZPR3-1) (Leu 29-Ala 466) with a His tag at the C-terminus was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	29-466aa
Description	May participate in the regulation of T-cell-mediated immune response. 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. May be involved in the development of acute and chronic transplant rejection and in the regulation of lymphocytic activity at mucosal surfaces. Could also play a key role in providing the placenta and fetus with a suitable immunological environment throughout pregnancy. Both isoform 1 and isoform 2 appear to be redundant in their ability to modulate CD4 T-cell responses. Isoform 2 is shown to enhance the induction of cytotoxic T-cells and selectively stimulates interferon gamma production in the presence of T-cell receptor signaling. B7-H3 locus underwent genomic duplication leading to tandemly repeated immunoglobulin-like V and C domains (VC domains). The dominantly expressed human B7-H3 isoform contains tandemly duplicated VC domains. In contrast, mouse B7-H3 transcript contains only one single VC domain form due to an exon structure corresponding to V domain- (pseudoexon C)- (pseudoexon V)-C domain. This duplication appearing in primates is suggested to be very recent supporting a model

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	of multiple independent emergence of tandem VC repeats within human and monkey species.
Tag	C-His
Molecular Mass	48.4 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

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

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mRNA Refseq	NM_001024736
Protein Refseq	NP_001019907
MIM	605715
UniProt ID	Q5ZPR3

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