Data Sheet (Cat.No.TMPY-05641)

TargetMol

B7-H3 Protein, Human, Recombinant (His & Avi), Biotinylated

General Information

Synonyms:	4Ig-B7-H3;B7-H3;B7H3;CD276 molecule;B7RP-2
Protein Construction:	A DNA sequence encoding the human CD276 (Q5ZPR3) (Met1-Thr461) was expressed with a c-terminal polyhistidine tagged AVI tag at the C-terminus. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed. Predicted N terminal: Leu 29
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q5ZPR3
Molecular Weight:	49.8 kDa (predicted)

QC Testing

Biological Activity:	Immobilized Anti-B7-H3 Antibody, IgG1 Kappa at 2 μg/mL (100 μL/well) can bind Recombinant Human B7-H3 Protein (His & AVI Tag), Biotinylated , the EC50 is 4.3-13 ng/mL.
Purity:	> 95 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

B7-H3 is a member of the B7 family of immune regulatory ligands that is thought to attenuate peripheral immune responses through co-inhibition. It plays an important role in adaptive immune responses, and was shown to either promote or inhibit T-cell responses in various experimental systems. B7-H3 may play an important role in

muscle-immune interactions, providing further evidence of the active role of muscle cells in local immunoregulatory processes. B7-H3 is a novel protein structurally related to the B7 family of ligands by the presence of a single set of immunoglobulin-V-like and immunoglobulin-C-like (VC) domains. Previous studies have correlated its overexpression with poor prognosis and decreased tumor-infiltrating lymphocytes in various carcinomas including uterine endometrioid carcinomas, and mounting evidence supports an immuno-inhibitory role in ovarian cancer prognosis. Recently, B7-H3 expression has been reported in several human cancers indicating an additional function of B7-H3 as a regulator of antitumor immunity.Cancer ImmunotherapyCo-inhibitory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint Detection: AntibodiesImmune Checkpoint Detection: ELISA AntibodiesImmune Checkpoint Detection: FCM AntibodiesImmune Checkpoint Detection: ICC AntibodiesImmune Checkpoint Detection: IP AntibodiesImmune Checkpoint Detection: WB AntibodiesImmune Checkpoint TargetsImmunotherapyTargeted Therapy

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