Data Sheet (Cat.No.TMPK-00172)

B7-H4 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	B7H4;B7x;VTCN1;PRO1291;B7S1;B7h.5;FLJ22418;B7-H4
Protein Construction:	Phe29-Ala258
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q7Z7D3-1
Molecular Weight:	28.2 kDa (predicted). Due to glycosylation, the protein migrates to 52-68 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Human B7-H4, His Tag at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Anti-B7-H4 Antibody, hFc Tag with the EC50 of 9.4ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
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, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

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-H4, also known as B7x and B7S1, is a 50-80 kDa glycosylated member of the B7 family of immunomodulatory proteins.B7-H4 is up-regulated in several carcinomas in correlation with tumor progression and metastasis. A soluble form of B7-H4 is elevated in the serum of ovarian cancer, renal cell carcinoma, and rheumatoid arthritis patients, also in correlation with advanced disease status .

Reference

Smith J B, et al. B7-H4 as a potential target for immunotherapy for gynecologic cancers: a closer look[J]. Gynecologic Oncology, 2014, 134(1):181-189.