Data Sheet (Cat.No.TMPY-01451)

TargetMol

MESDC2 Protein, Human, Recombinant (His)

General Information

Synonyms:	MESD;mesoderm development candidate 2;BOCA
Protein Construction:	A DNA sequence encoding the human MESDC2 (NP_055969.1) (Ala 34-Lys 230) was fused with a signal peptide at the N-terminus and a polyhistidine tag at the C-terminus. Predicted N terminal: Ala 34
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q14696-1
Molecular Weight:	23.6 kDa (predicted); 27 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 97 % 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:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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

MESD (Mesoderm Development LRP Chaperone) is a Protein Coding gene. LDLR chaperone MESD, also known as Mesoderm development protein, Mesoderm development candidate 2, Renal carcinoma antigen NY-REN-61, and MESDC2, is a member of the MESD family. It is widely expressed in the thyroid, placenta, and other tissues. MESDC2 is a chaperone specifically assisting the folding of beta-propeller/EGF modules within the family of low-density

lipoprotein receptors (LDLRs). The LDLR maturation activity resides in the N- and C-terminal unstructured regions. MESDC2 acts as a modulator of the Wnt pathway since some LDLRs are coreceptors for the canonical Wnt pathway. MESDC2 is essential for the specification of embryonic polarity and mesoderm induction.

Reference

Scanlan M.J. et al., 1999, Int. J. Cancer 83:456-464.
Veltman,IM. et al.,2005, Hum Mol Genet 14 (14):1955-63.
Koduri V. et al., 2007, Biochemistry 46:6570-7.