Data Sheet (Cat.No.TMPY-02320)

TargetMol

LAIR2 Protein, Human, Recombinant,Low Endotoxin

General Information

Synonyms:	LAIR2;leukocyte associated immunoglobulin like receptor 2;XXbac-BCX535A19.6;MGC71634; CD306
Protein Construction:	A DNA sequence encoding the human LAIR2 (NP_002279.2) (Met 1-Pro 152) was expressed and purified. Predicted N terminal: Gln 22
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q6ISS4-1
Molecular Weight:	14.1 kDa (predicted); 20 kDa (reducing condition, due to glycosylation)

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:	> 94 % as determined by SDS-PAGE
Endotoxin:	< 0.005 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

Leukocyte-associated immunoglobulin-like receptor 2 (LAIR2), also known as CD306, is a 131 amino acid protein containing one Ig-like C2-type domain. It is expressed as a soluble receptor exhibiting high affinity for various collagen molecules to which it binds in a hydroxyproline-dependent manner. LAIR2 is a member of the immunoglobulin superfamily and was identified by its similarity to LAIR1, an inhibitory receptor present on

mononuclear leukocytes. LAIR2 is thought to be secreted and may help modulate mucosal tolerance. As a natural competitor for LAIR1, soluble LAIR2 prevents binding of human LAIR1 to collagens and LAIR1 cross-linking, thereby regulating its inhibitory potential. Accordingly, LAIR2 is suggested to perform an immunoregulatory function.

Reference

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