Data Sheet (Cat.No.TMPY-05419)

TargetMol

AMIGO2 Protein, Human, Recombinant (His), Biotinylated

General Information

Synonyms: ALI1;AMIGO-2;DEGA;adhesion molecule with Ig-like domain 2

Protein Construction: A DNA sequence encoding the human AMIGO2 (NP_862830.1) (Met1-Thr398) was expressed with a polyhistidine tag at the C-terminus. The purified protein was biotinylated in vitro. Predicted N terminal: Val 40

Species: Human

Expression Host: HEK293 Cells

Accession: Q86SJ2

Molecular Weight: 42.3 kDa (predicted)

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: > 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:

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

AMIGO2 contains Ig-like C2-type (immunoglobulin-like) domain, 6 LRR (leucine-rich) repeats, 1 LRRCT domain and 1 LRRNT domain. It belongs to the immunoglobulin superfamily, AMIGO family. AMIGO2 may mediate homophilic as well as heterophilic cell-cell interaction with AMIGO1 or AMIGO3. It is required for depolarization-dependent survival of cultured cerebellar granule neurons. AMIGO2 may also contribute to signal transduction through its

intracellular domain. It may play a role in the tumorigenesis of a subset of gastric adenocarcinomas. AMIGO2 is highly expressed in breast, ovary, cervix, and uterus.

Reference

Rouhiainen A,et al.(2003) AMIGO, a transmembrane protein implicated in axon tract development, defines a novel protein family with leucine-rich repeats. J Cell Biol. 160:963-73.

Kikkawa Y,et al.(2003) Alivin 1, a novel neuronal activity-dependent gene, inhibits apoptosis and promotes survival of cerebellar granule neurons. J Neurosci. 23:5887-96.

Bassi R,et al.(2004) DEGA/AMIGO-2, a leucine-rich repeat family member, differentially expressed in human gastric adenocarcinoma: effects on ploidy, chromosomal stability, cell adhesion/migration and tumorigenicity. Oncogene 23:5056-67.

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