Data Sheet (Cat.No.TMPJ-01137)

MIA Protein, Human, Recombinant (His)

General Information

Synonyms:	MIA;Melanoma Inhibitory Activity Protein;Melanoma-Derived Growth Regulatory Protein
Protein Construction:	Gly25-Gln131
Species:	Human
Expression Host:	E. coli
Accession:	Q16674
Molecular Weight:	14 KDa (reducing condition)
AA Sequence:	Gly25-Gln131

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4.

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:

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

Melanoma Inhibitory Activity Protein (MIA) is an autocrine growth regulatory protein secreted from chondrocytes and malignant melanoma cells, which was the first discovered member of a family of secreted cytokines termed the MIA/OTOR family. The four known members of this family: MIA, MIA2, OTOR and TANGO each contain a Src homology-3 (SH3)-like domain. MIA acts as a potent tumor cell growth inhibitor for malignant melanoma cells and some other neuroectodermal tumors, including gliomas, in an autocrine fashion and promotes melanoma

metastasis by binding competitively to fibronectin and laminin in a manner that results in melanoma cell detachment from the extracellular matrix in vivo. The protein MIA has been shown to represent a very sensitive and specific serum marker for systemic malignant melanoma that might be useful for staging of primary melanomas, detection of progression from localized to metastatic disease during follow-up, and monitoring therapy of advanced melanomas. Elevated levels of MIA may represent a clinically useful marker for diagnosis of melanoma metastasis as well as a potential marker for rheumatoid arthritis.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481