

# Summary

Name	MIA
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ $\mu$ g as determined by LAL test.
Construction	Recombinant Human Melanoma Inhibitory Activity Protein is produced by our E.coli expression system and the target gene encoding Gly25-Gln131 is expressed with a 6His tag at the C-terminus.
Accession #	Q16674
Host	E.coli
Species	Human
Predicted Molecular Mass	13.31 KDa
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SDS-PAGE** image



## Background



#### Melanoma-Derived Growth Regulatory Protein; Melanoma Inhibitory Activity **Alternative Names** Protein; MIA 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.

#### **Note** For Research Use Only , Not for Diagnostic Use.