

Melanoma Inhibitory Activity Protein 1 (MIA1) Active Protein | MIA1 active protein

Active Melanoma Inhibitory Activity Protein 1 (MIA1)

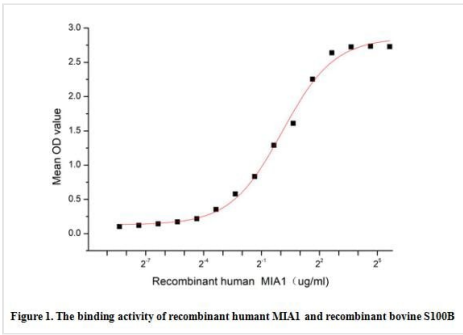
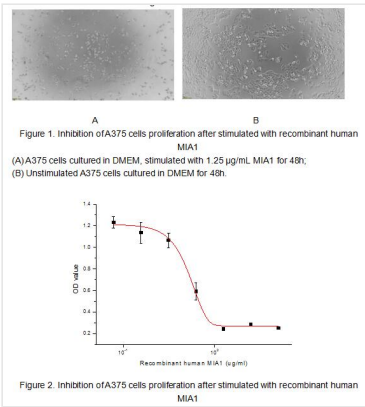
CATALOG # AAA161926	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Melanoma Inhibitory Activity Protein 1 (MIA1); Active Melanoma Inhibitory Activity Protein 1 (MIA1); Melanoma Inhibitory Activity Protein 1; CD-RAP; Melanoma-derived growth regulatory protein4; MIA1 active protein

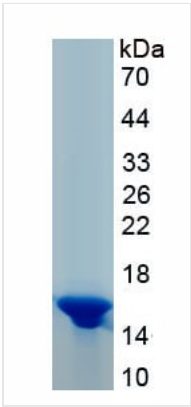
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 80% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Gly25~Gln1 31
Applicable Applications for MIA1 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.7
Research Area	Immune molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Melanoma inhibitory activity (MIA), also known as cartilage-derived retinoic acid-sensitive protein (CD-RAP), is a 12-kDa protein that is secreted from both chondrocytes and malignant melanoma cells. MIA has been reported to have effects on cell growth and adhesion, and it may play a role in melanoma metastasis and cartilage development. In the presence of MIA, we observed enhanced migratory ability of melanocytic cells, induction of melanoma-associated genes as well as inhibition of apoptosis due to anoikis. S100 Calcium Binding Protein B (S100B) is a high affinity ligand for MIA1, a functional binding ELISA assay was conducted to detect the interaction of recombinant human MIA1 and recombinant bovine S100B. Briefly, MIA1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to S100B-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-MIA1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 µL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human MIA1 and recombinant bovine S100B was shown in Figure 1, the EC50 for this effect is 1.1 µg/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for MIA1 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	321400133
NCBI GeneID	8190
NCBI Accession #	NP_001189482.1
NCBI GenBank Nucleotide #	NM_001202553.1
UniProt Accession #	Q16674; Q6FHV3
Molecular Weight	14,509 Da

NCBI Official Full Name	melanoma-derived growth regulatory protein
NCBI Official Synonym Full Names	melanoma inhibitory activity
NCBI Official Symbol	MIA
NCBI Official Synonym Symbols	CD-RAP
NCBI Protein Information	melanoma-derived growth regulatory protein
UniProt Protein Name	Melanoma-derived growth regulatory protein
UniProt Gene Name	MIA
UniProt Entry Name	MIA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/melanoma-inhibitory-activity-protein-1-mia1/161926>