

[KD Validated] Anti-MRI1 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

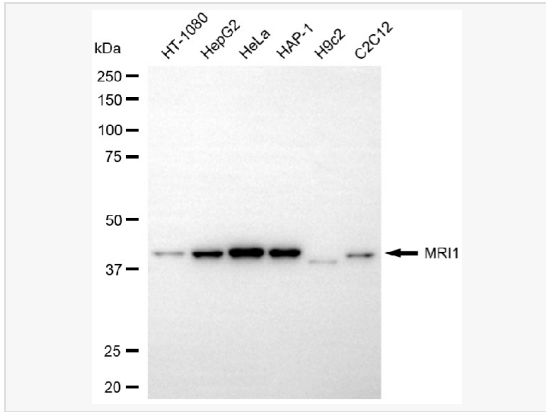
Catalog # M020367

Product Information

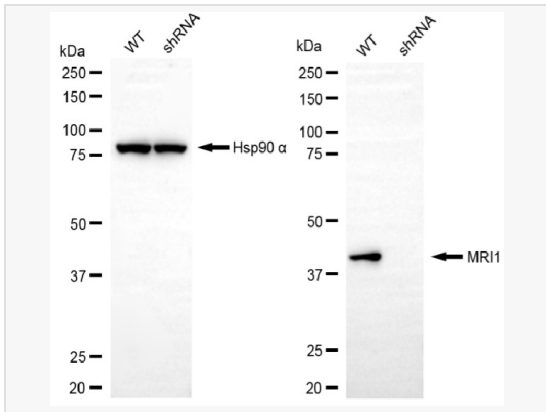
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:2,500; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Mouse
Clonality	Monoclonal
Clone No.	58G77Q16
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human MRI1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-MRI1 Mouse mAb [58G77Q16] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

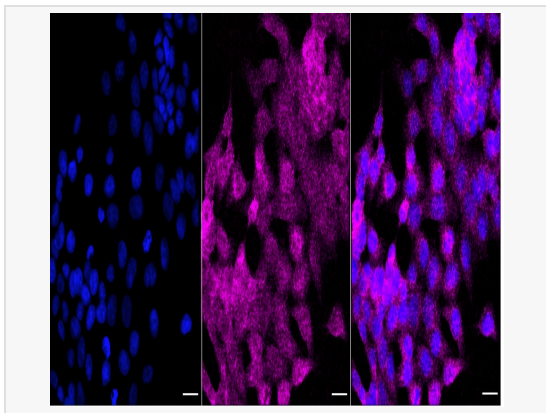
Synonyms	MRI1; Methylthioribose-1-Phosphate Isomerase 1; MRDI; Mediator Of RhoA-Dependent Invasion; Ypr118w; MtnA; Translation Initiation Factor EIF-2B Subunit Alpha/Beta/Delta-Like Protein; S-Methyl-5-Thioribose-1-Phosphate Isomerase 1; Methylthioribose-1-Phosphate Isomerase; MTR-1-P Isomerase; EC 5.3.1.23; MGC3207; M1Pi; Methylthioribose-1-Phosphate Isomerase Homolog (S. Cerevisiae); Methylthioribose-1-Phosphate Isomerase Homolog; S-Methyl-5-Thioribose-1-Phosphate Isomerase.
Calculated MW	Calculated MW: 39 kDa, Observed MW: 41 kDa
Uniprot ID	Q9BV20
Gene ID	84245
Background	This enzyme functions in the methionine salvage pathway by catalyzing the interconversion of methylthioribose-1-phosphate and methylthioribulose-1-phosphate. Elevated expression of the encoded protein is associated with metastatic melanoma and this protein promotes melanoma cell invasion independent of its enzymatic activity. Mutations in this gene may be associated with vanishing white matter disease (VMWD).



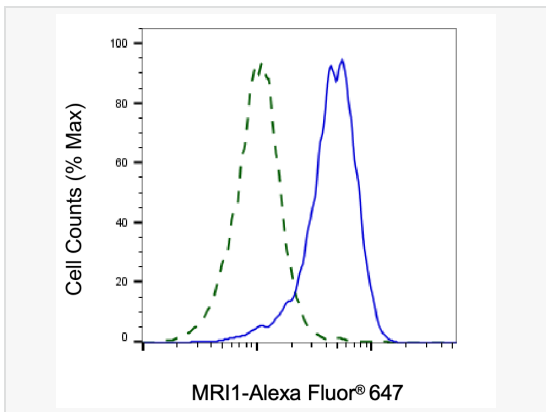
Western blotting analysis using MRI1 antibody (M020367). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MRI1 antibody (M020367, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



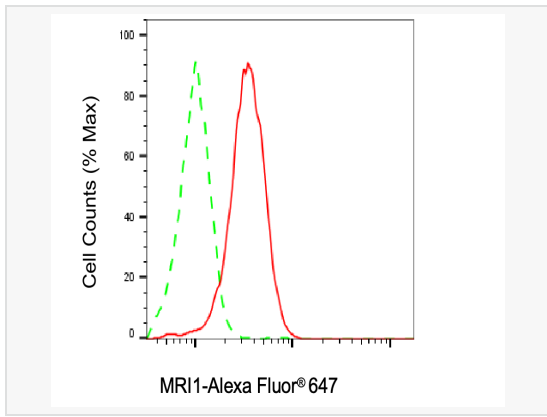
Western blotting analysis using MRI1 antibody (M020367). MRI1 expression in wild-type (WT) and MRI1 shRNA knockdown (KD) HepG2 cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with MRI1 antibody (M020367, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



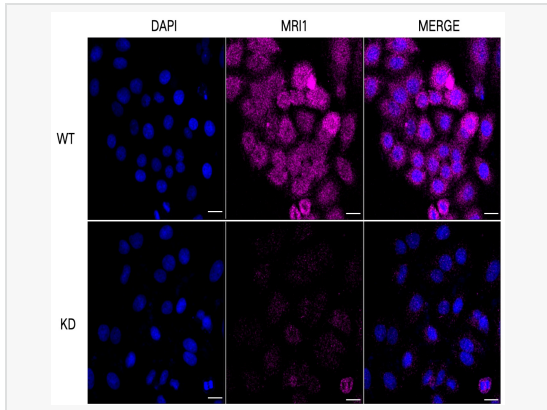
Immunocytochemical staining of HAP-1 cells with MRI1 antibody (M020367, 1:1,000). Nuclei were stained blue with DAPI; MRI1 was stained magenta with Alexa Fluor[®] 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 μ m.



Validation of MRI1 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HepG2 cells were stained with MRI1 antibody (M020367, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MRI1 expression in HAP-1 cells using MRI1 antibody (M020367, 1:2,000). Green, isotype control; red, MRI1.



Immunocytochemical staining of HeLa cells using MRI1 antibody (M020367, 1:1,000). Top panel: wild-type (WT); Bottom panel: MRI1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Acyl-CoA dehydrogenase short chain was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m.