Product Name: **KD-Validated MRI1 Mouse Monoclonal Antibody**
Catalog #: **KVAb00296**
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:50-1:100
Molecular Weight	Calculated MW: 39.2kDa

Antigen Information

Gene Name	MRI1
Alternative Names	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
Gene ID	84245.0
SwissProt ID	Q9BV20
Immunogen	Recombinant protein of human MRI1

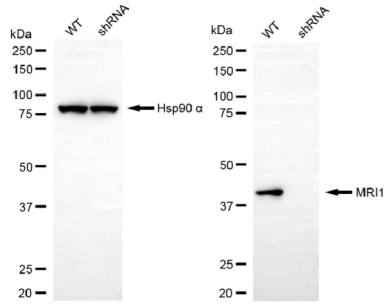
Background

This enzyme functions in the methionine salvage pathway by catalyzing the interconversion of methylthioribose-1-phosphate and methythioribulose-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). [provided by RefSeq, Jul 2016]

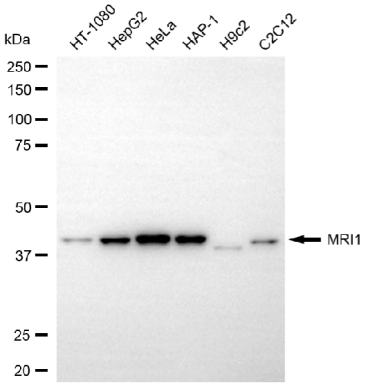
Research Area

Signal Transduction,Epigenetics and Nuclear Signaling,Metabolism

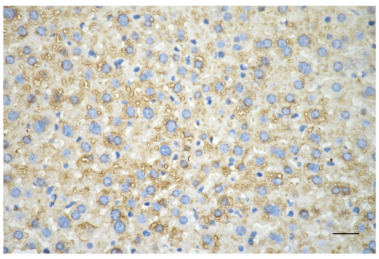
Image Data



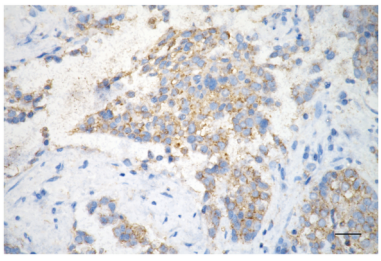
Western blotting analysis using MRI1 antibody (KVAb00296). MRI1 expression in wild-type (WT) and MRI1 shRNA knockdown (KD) HepG2 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with MRI1 antibody (KVAb00296, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



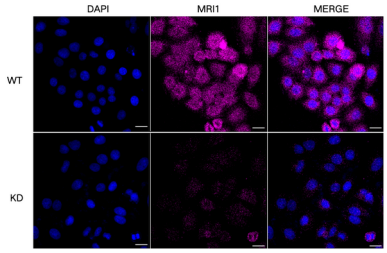
Western blotting analysis using MRI1 antibody (KVAb00296). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MRI1 antibody (KVAb00296, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



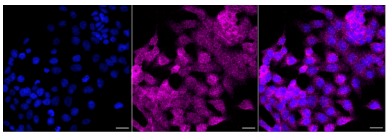
Immunohistochemistry was performed on paraffin-embedded mouse liver using MRI1 antibody (KVAb00296, 1:100). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



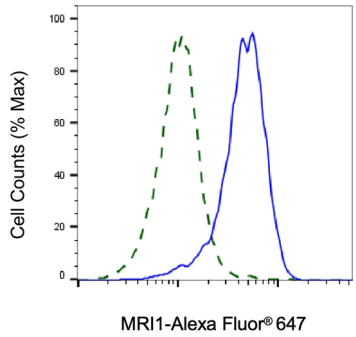
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using MRI1 antibody (KVAb00296, 1:100). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



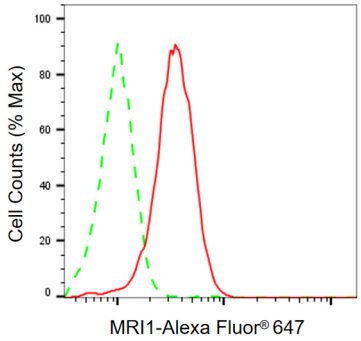
Immunocytochemical staining of HeLa cells using MRI1 antibody (KVAb00296, 1:1,000), Top panel: wild-type (WT); Bottom panal: MRI1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; MRI1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.



Immunocytochemical staining of HAP-1 cells with MRI1 antibody(KVAb00296, 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 μm.



Validation of MRI1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HepG2 cells were stained with MRI1 antibody (KVAb00296, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MRI1 expression in HAP-1 cells using MRI1 antibody (KVAb00296, 1:2,000). Green, isotype control; red, MRI1.