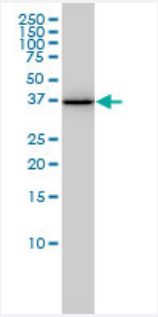
AKR1A1 monoclonal antibody (M01), clone 1A11-2A4

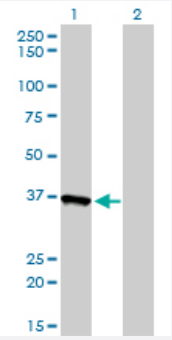
Catalog # H00010327-M01 Size 100 ug

Applications



Western Blot (Cell lysate)

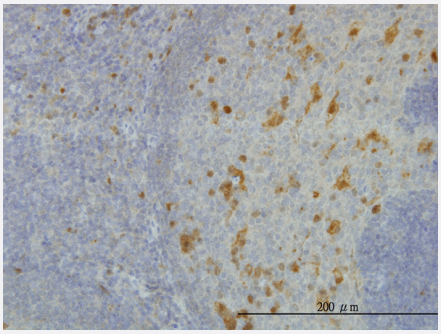
AKR1A1 monoclonal antibody (M01), clone 1A11-2A4 Western Blot analysis of AKR1A1 expression in HL-60 (Cat # L014V1).



Western Blot (Transfected lysate)

Western Blot analysis of AKR1A1 expression in transfected 293T cell line by AKR1A1 monoclonal antibody (M01), clone 1A11-2A4.

Lane 1: AKR1A1 transfected lysate(36.6 KDa).
Lane 2: Non-transfected lysate.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to AKR1A1 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 0.75 ug/ml]

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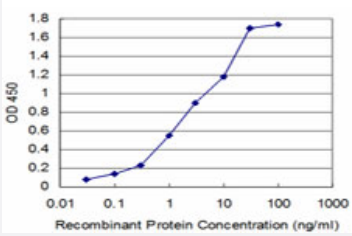
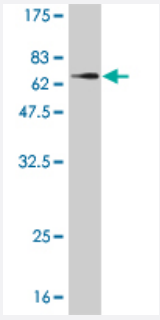


Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged AKR1A1 is approximately 0.1ng/ml as a capture antibody.



Western Blot detection against Immunogen (61.49 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant AKR1A1.
Immunogen	AKR1A1 (AAH00670, 1 a.a. ~ 325 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MAASCVLLHTGQKMPLIGLGTWKSEPGQVKAAVKYALSVGYRHIDCAAIYGNEPEIGEALKEDVG PGKAVPREELFVTSKLWNTKHHPEDVEPALRKTLADLQLEYLDLYLMHWPYAFERGDNPFPKNA DGTICYDSTHYKETWKALEALVAKGLVQALGLSNFNSRQIDDILSVASVRPAVLQVECHPYLAQNE LIAHCQARGLEVTAYSPLGSSDRAWRDPDEPVLLEEPVVLALAEKYGRSPAQILLRWQVQRKVICI PKSITPSRILQNIKVFDFTFSPEEMKQLNALNKNWRYIVPMLTVDGKRVPRDAGHPLYPFNDPY
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (93); Rat (94)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (61.49 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

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Applications

- Western Blot (Cell lysate)

  AKR1A1 monoclonal antibody (M01), clone 1A11-2A4 Western Blot analysis of AKR1A1 expression in HL-60 (Cat # L014V1).

  Protocol Download

- Western Blot (Transfected lysate)

  Western Blot analysis of AKR1A1 expression in transfected 293T cell line by AKR1A1 monoclonal antibody (M01), clone 1A11-2A4.

  Lane 1: AKR1A1 transfected lysate(36.6 KDa).
  Lane 2: Non-transfected lysate.

  Protocol Download

- Western Blot (Recombinant protein)

  Protocol Download

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunoperoxidase of monoclonal antibody to AKR1A1 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 0.75 ug/ml]

  Protocol Download

- Sandwich ELISA (Recombinant protein)

  Detection limit for recombinant GST tagged AKR1A1 is approximately 0.1ng/ml as a capture antibody.

  Protocol Download

- ELISA

Gene Info — AKR1A1

Entrez GeneID	10327
GeneBank Accession#	BC000670
Protein Accession#	AAH00670
Gene Name	AKR1A1

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Gene Alias	ALDR1, ALR, ARM, DD3, MGC12529, MGC1380
Gene Description	aldo-keto reductase family 1, member A1 (aldehyde reductase)
Omim ID	103830
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This member, also known as aldehyde reductase, is involved in the reduction of biogenic and xenobiotic aldehydes and is present in virtually every tissue. Alternative splicing of this gene results in two transcript variants encoding the same protein. [provided by RefSeq
Other Designations	OTTHUMP00000009240|OTTHUMP00000009241|alcohol dehydrogenase|aldehyde reductase|aldo-keto reductase family 1, member A1|dihydrodiol dehydrogenase 3

Publication Reference

- Androgen receptor signaling induced by supraphysiological doses of dihydrotestosterone in human peripheral blood lymphocytes.

  Esther Imperlini, Annamaria Mancini, Sara Spaziani, Domenico Martone, Andreina Alfieri, Marica Gemei, Luigi del Vecchio, Pasqualina Buono, Stefania Orru.

  Proteomics 2010 Sep; 10(17):3165.

  Application: WB-Ce, Human, Human lymphocytes

- Aldo-keto reductase 1C2 fails to metabolize doxorubicin and daunorubicin in vitro.

  Takahashi RH, Bains OS, Pfeifer TA, Grigliatti TA, Reid RE, Riggs KW.

  Drug Metabolism and Disposition 2008 Mar; 36(6):991.

  Application: WB, Recombinant protein

- Two allelic variants of aldo-keto reductase 1A1 exhibit reduced in vitro metabolism of daunorubicin.

  Bains OS, Takahashi RH, Pfeifer TA, Grigliatti TA, Reid RE, Riggs KW.

  Drug Metabolism and Disposition 2008 Feb; 36(5):904.

  Application: WB, Human, Human liver, recombinant protein

- Mapping of phosphorylation-dependent anti-tau monoclonal antibodies in immunoblots using human tau-constructs synthesized by native chemical ligation.

  Singer D, Herth N, Kuhlmann J, Holland-Nell K, Beck-Sickinger AG, Hoffmann R.

  Biochemical and Biophysical Research Communications 2007 Dec; 367(2):318.

  Application: WB, As a positive control in Western blotting

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Pathway

- Caprolactam degradation
- Glycerolipid metabolism
- Glycolysis / Gluconeogenesis
- Metabolic pathways

Disease

- Adenocarcinoma
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Lung Neoplasms
- Lymphoma
- Pulmonary Disease
- Urinary Bladder Neoplasms
- Werner syndrome

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