ARG42972
anti-AKR1D1 antibody [6I4]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [6I4] recognizes AKR1D1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	6I4
Isotype	IgG2b
Target Name	AKR1D1
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence of Human AKR1D1. (EEMKDIEALNKNVRFVELLMWRDHPEYPFHDEY)
Conjugation	Un-conjugated
Alternate Names	Aldo-keto reductase family 1 member D1; Delta; EC 1.3.1.3; CBAS2; SRD5B1; 4; 3-oxo-5-beta-steroid 4-dehydrogenase; 3o5bred

Application Instructions

Application table

Application	Dilution
FACS	1:150 - 1:500
IHC-P	1:200 - 1:1000
WB	1:500 - 1:2000

Application Note: IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 37 kDa

Properties

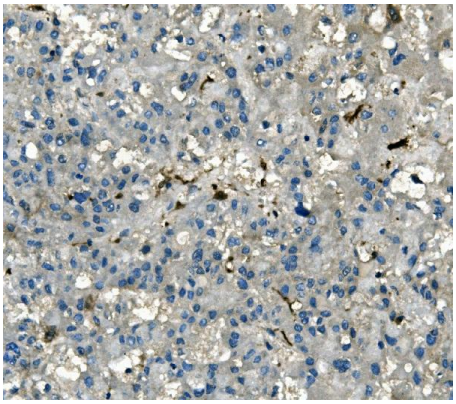
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

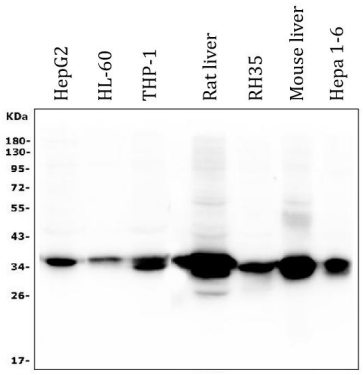
Gene Symbol	AKR1D1
Gene Full Name	aldo-keto reductase family 1, member D1
Background	The enzyme encoded by this gene is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure. Deficiency of this enzyme may contribute to hepatic dysfunction. Three transcript variants encoding different isoforms have been found for this gene. Other variants may be present, but their full-length natures have not been determined yet. [provided by RefSeq, Jul 2010]
Function	Catalyzes the stereospecific NADPH-dependent reduction of the C4-C5 double bond of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure to yield an A/B cis-ring junction. This cis-configuration is crucial for bile acid biosynthesis and plays important roles in steroid metabolism. Capable of reducing a broad range of delta-(4)-3-ketosteroids from C18 (such as, 17beta-hydroxyestr-4-en-3-one) to C27 (such as, 7alpha-hydroxycholest-4-en-3-one). [UniProt]
Calculated Mw	37 kDa
Cellular Localization	Cytoplasm. [UniProt]

Images



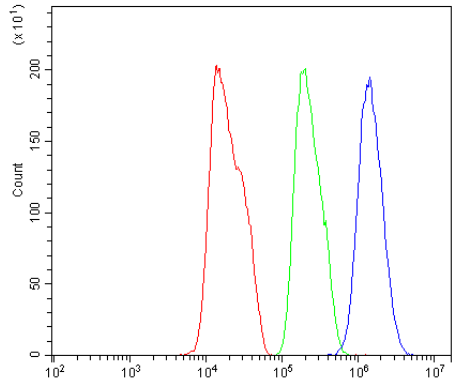
ARG42972 anti-AKR1D1 antibody [6I4] IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42972 anti-AKR1D1 antibody [6I4] at 1 µg/ml dilution, overnight at 4°C.



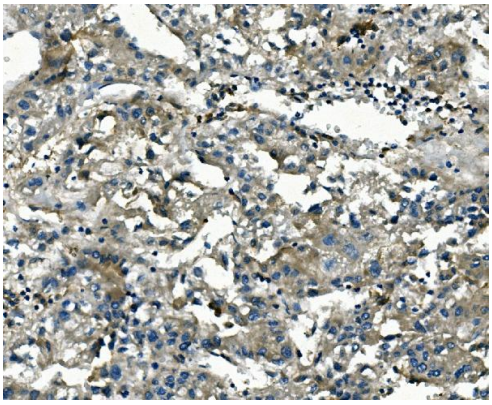
ARG42972 anti-AKR1D1 antibody [6I4] WB image

Western blot: 50 µg of sample under reducing conditions. HepG2, HL-60, THP-1, Rat liver, RH35, Mouse liver and Hepa 1-6 whole cell lysates stained with ARG42972 anti-AKR1D1 antibody [6I4] at 0.5 µg/ml dilution, overnight at 4°C.



ARG42972 anti-AKR1D1 antibody [6I4] FACS image

Flow Cytometry: HepG2 cells were blocked with 10% normal goat serum and then stained with ARG42972 anti-AKR1D1 antibody [6I4] (blue) at 1 µg/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Mouse IgG (1 µg/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



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