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AKR1B10 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant AKR1B10.
Catalog # AT1091a

Product Information

Application	WB, IHC, IF, E
Primary Accession	O60218
Other Accession	NM_020299
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1A6
Calculated MW	36020

Additional Information

Gene ID	57016
Other Names	Aldo-keto reductase family 1 member B10, 111-, ARL-1, Aldose reductase-like, Aldose reductase-related protein, ARP, hARP, Small intestine reductase, SI reductase, AKR1B10, AKR1B11
Target/Specificity	AKR1B10 (NP_064695, 76 a.a. ~ 143 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	AKR1B10 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

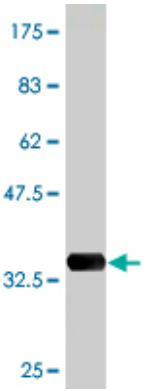
This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This member can efficiently reduce aliphatic and aromatic aldehydes, and it is less active on hexoses. It is highly expressed in adrenal gland, small intestine, and colon, and may play an important role in liver carcinogenesis.

References

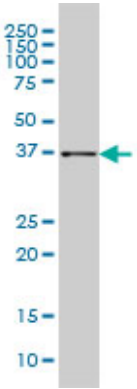
1.Aldo-Ketoreductase Family 1 B10 (AKR1B10) as A Biomarker to Distinguish Hepatocellular Carcinoma from

Benign Liver Lesions.Matkowskyj KA, Bai H, Liao J, Zhang W, Li H, Rao S, Omary R, Yang GY.Human Pathology(2013) Volume 45, Issue 4, April 2014, Pages 834–8432.An integrated functional genomics approach identifies the regulatory network directed by brachyury (T) in chordoma.Nelson AC, Pillay N, Henderson S, Presneau N, Tirabosco R, Halai D, Berisha F, Flicek P, Stemple DL, Stern C, Wardle FC, Flanagan AM.J Pathol. 2012 Jul 30. doi: 10.1002/path.4082.3.A therapeutic method for the direct reprogramming of human liver cancer cells with only chemicals.Moriguchi H, Zhang Y, Mihara M, Sato C.Sci Rep. 2012;2:280. Epub 2012 Feb 21.4.Overexpression and oncogenic function of aldo-keto reductase family 1B10 (AKR1B10) in pancreatic carcinoma.Chung YT, Matkowskyj KA, Li H, Bai H, Zhang W, Tsao MS, Liao J, Yang GY.Mod Pathol. 2012 Jan 6. doi: 10.1038/modpathol.2011.191. [Epub ahead of print]5.AKR1B10 expression is associated with less aggressive hepatocellular carcinoma: a clinicopathological study of 168 cases.Schmitz KJ, Sotiropoulos GC, Baba HA, Schmid KW, Muller D, Paul A, Auer T, Gamerith G, Loeffler-Ragg J.Liver International DOI:10.1111/ j.1478-3231.2011. 02511.x6.Naturally occurring variants of human aldo-keto reductases with reduced in vitro metabolism of daunorubicin and doxorubicin.Bains OS, Grigliatti TA, Reid RE, Riggs KW.J Pharmacol Exp Ther. 2010 Sep 13. [Epub ahead of print]7.Combined functional genome survey of therapeutic targets for hepatocellular carcinoma.Satow R, Shitashige M, Kanai Y, Takeshita F, Ojima H, Jigami T, Honda K, Kosuge T, Ochiya T, Hirohashi S, Yamada T.Clin Cancer Res. 2010 May 1;16(9):2518-28. Epub 2010 Apr 13.8.Proteomic Analysis of Bronchoalveolar Lavage Fluid Obtained from Rats Exposed to Formaldehyde.Ahn KH, Kim SK, Lee JM, Jeon HJ, Lee DH, Kim DK.JOURNAL OF HEALTH SCIENCE Vol. 56 (2010) , No. 3 287-295

Images



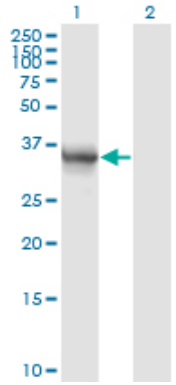
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (33.22 KDa) .

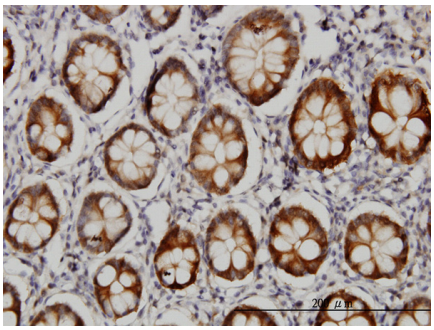


AKR1B10 monoclonal antibody (M01), clone 1A6 Western Blot analysis of AKR1B10 expression in HepG2 ((Cat # AT1091a)

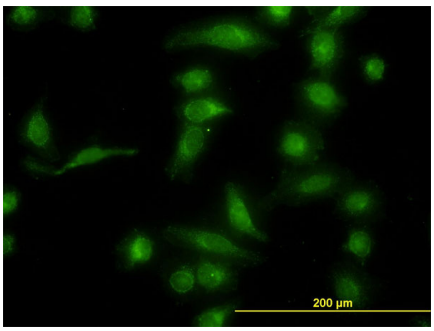
Western Blot analysis of AKR1B10 expression in transfected 293T cell line by AKR1B10 monoclonal antibody (M01), clone 1A6.

Lane 1: AKR1B10 transfected lysate(36 KDa).
Lane 2: Non-transfected lysate.

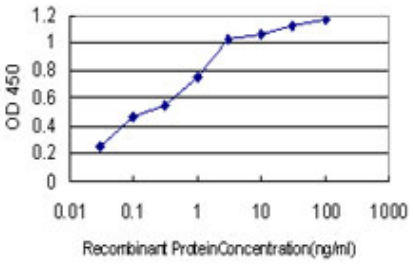




Immunoperoxidase of monoclonal antibody to AKR1B10 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to AKR1B10 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged AKR1B10 is approximately 0.03ng/ml as a capture antibody.