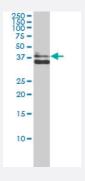


# AKR1C4 monoclonal antibody (M01), clone 2C11

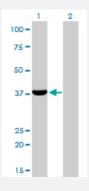
Catalog # H00001109-M01 Size 100 ug

## **Applications**



#### Western Blot (Cell lysate)

AKR1C4 monoclonal antibody (M01), clone 2C11 Western Blot analysis of AKR1C4 expression in MCF-7 ( Cat # L046V1 ).

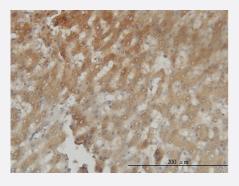


#### Western Blot (Transfected lysate)

Western Blot analysis of AKR1C4 expression in transfected 293T cell line by AKR1C4 monoclonal antibody (M01), clone 2C11.

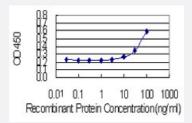
Lane 1: AKR1C4 transfected lysate(37.2 KDa).

Lane 2: Non-transfected lysate.



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

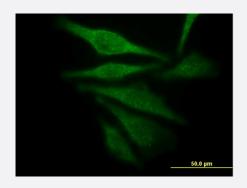
Immunoperoxidase of monoclonal antibody to AKR1C4 on formalin-fixed paraffin-embedded human liver tissue. [antibody concentration 3 ug/ml]



## Sandwich ELISA (Recombinant protein)

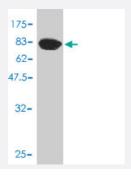
Detection limit for recombinant GST tagged AKR1C4 is 3 ng/ml as a capture antibody.





#### Immunofluorescence

Immunofluorescence of monoclonal antibody to AKR1C4 on HepG2 cell. [antibody concentration 15 ug/ml]



Western Blot detection against Immunogen (61.27 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a full length recombinant AKR1C4.
Immunogen	AKR1C4 (AAH20744, 1 a.a. ~ 323 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MDPKYQRVELNDGHFMPVLGFGTYAPPEVPRNRAVEVTKLAIEAGFRHIDSAYLYNNEEQVGLAIR SKIADGSVKREDIFYTSKLWCTFFQPQMVQPALESSLKKLQLDYVDLYLLHFPMALKPGETPLPK DENGKVIFDTVDLSATWEVMEKCKDAGLAKSIGVSNFNYRQLEMILNKPGLKYKPVCNQVECHPY LNQSKLLDFCKSKDIVLVAHSALGTQRHKLWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQ RGVVVLAKSYNEQRIRENIQVFEFQLTSEDMKVLDGLNRNYRYVVMDFLMDHPDYPFSDEY
Host	Mouse
Reactivity	Human
Isotype	lgG1 kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (61.27 KDa).
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.



## **Applications**

Western Blot (Cell lysate)

AKR1C4 monoclonal antibody (M01), clone 2C11 Western Blot analysis of AKR1C4 expression in MCF-7 ( Cat # L046V1 ).

**Protocol Download** 

Western Blot (Transfected lysate)

Western Blot analysis of AKR1C4 expression in transfected 293T cell line by AKR1C4 monoclonal antibody (M01), clone 2C11.

Lane 1: AKR1C4 transfected lysate(37.2 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 AKR1C4 on formalin-fixed paraffin-embedded human liver tissue. [antibody concentration 3 ug/ml]

**Protocol Download** 

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged AKR1C4 is 3 ng/ml as a capture antibody.

**Protocol Download** 

- ELISA
- Immunofluorescence

Immunofluorescence of monoclonal antibody to AKR1C4 on HepG2 cell. [antibody concentration 15 ug/ml]

# Gene Info — AKR1C4

Entrez GeneID	1109
GeneBank Accession#	BC020744
Protein Accession#	AAH20744



#### **Product Information**

Gene Name	AKR1C4
Gene Alias	3-alpha-HSD, C11, CDR, CHDR, DD4, HAKRA, MGC22581
Gene Description	aldo-keto reductase family 1, member C4 (chlordecone reductase; 3-alpha hydroxysteroid dehydr ogenase, type I; dihydrodiol dehydrogenase 4)
Omim ID	<u>600451</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and keto nes to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in liver. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. [provided by RefSeq
Other Designations	3 alpha-hydroxysteroid dehydrogenase/dihydrodiol dehydrogenase 4 OTTHUMP00000018997 al do-keto reductase family 1, member C4 chlordecone reductase dihydrodiol dehydrogenase 4 dihydrodiol dehydrogenase isozyme DD4 type I 3-alpha-hydroxysteroid dehydrogenase

## **Publication Reference**

 Regulation of Human 3{alpha}-Hydroxysteroid Dehydrogenase (AKR1C4) Expression by the Liver X Receptor {alpha}.

Stayrook KR, Rogers PM, Savkur RS, Wang Y, Su C, Varga G, Bu X, Wei T, Nagpal S, Liu XS, Burris TP.

Molecular Pharmacology 2007 Nov; 73(2):607.

Application: WB, Human, HepG2 cells

## Pathway

- Androgen and estrogen metabolism
- C21-Steroid hormone metabolism
- Metabolic pathways
- Metabolism of xenobiotics by cytochrome P450
- Primary bile acid biosynthesis



### Disease

- Alzheimer Disease
- Atherosclerosis
- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease
- Lung Neoplasms
- Obesity
- Pulmonary Disease
- Urinary Bladder Neoplasms
- Werner syndrome