

AKR1B10 (H-69): sc-135334

BACKGROUND

AKR1B10 (aldo-keto reductase family 1 member B10) is also known as aldose reductase-like-1 (ARL-1), small intestine reductase (SI reductase) or aldose reductase-related protein (ARP or hARP). AKR1B10 is found in many tissues but is predominantly expressed in small intestine, colon and adrenal gland. AKR1B10 is an efficient reductase for aliphatic and aromatic aldehydes. It plays a role in steroid metabolism as well as detoxification of aldehydes in digested food, and may be involved in the retinal-retinoic acid signaling pathway. AKR1B10 is prominently overexpressed in non-small cell lung carcinoma and adenocarcinoma. Cigarette smoking is an independent variable responsible for this overexpression. AKR1B10 may play a role regulating cell proliferation and cellular response to carbonyl stress.

REFERENCES

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3. Fukumoto, S., et al. 2005. Overexpression of the aldo-keto reductase family protein AKR1B10 is highly correlated with smokers' non-small cell lung carcinomas. *Clin. Cancer Res.* 11: 1776-1785.
4. Gallego, O., et al. 2006. Comparative functional analysis of human medium-chain dehydrogenases, short-chain dehydrogenases/reductases and aldo-keto reductases with retinoids. *Biochem. J.* 399: 101-109.
5. Martin, H.J., et al. 2006. Purification and characterization of AKR1B10 from human liver: role in carbonyl reduction of xenobiotics. *Drug Metab. Dispos.* 34: 464-470.
6. Mashkova, T.D., et al. 2006. Transcription TIMP3, DAPk1 and AKR1B10 genes in squamous cell lung cancer. *Mol. Biol.* 40: 1047-1054.
7. Yan, R., et al. 2007. Aldo-keto reductase family 1 B10 gene silencing results in growth inhibition of colorectal cancer cells: implication for cancer intervention. *Int. J. Cancer* 121: 2301-2306.
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CHROMOSOMAL LOCATION

Genetic locus: AKR1B10 (human) mapping to 7q33.

SOURCE

AKR1B10 (H-69) is a rabbit polyclonal antibody raised against amino acids 79-147 mapping within an internal region of AKR1B10 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

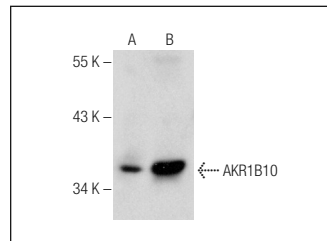
AKR1B10 (H-69) is recommended for detection of AKR1B10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AKR1B10 siRNA (h): sc-72341, AKR1B10 shRNA Plasmid (h): sc-72341-SH and AKR1B10 shRNA (h) Lentiviral Particles: sc-72341-V.

Molecular Weight of AKR1B10: 35 kDa.

Positive Controls: HISM cell lysate: sc-2229, Hep G2 cell lysate: sc-2227 or human stomach extract: sc-363780.

DATA



AKR1B10 (H-69): sc-135334. Western blot analysis of AKR1B10 expression in HISM whole cell lysate (A) and human stomach tissue extract (B).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **AKR1B10 (F-4): sc-365689** or **AKR1B10 (D-8): sc-365688**, our highly recommended monoclonal alternatives to AKR1B10 (H-69).