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AKR7A3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21988c

Product Information

Application	WB, E
Primary Accession	O95154
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54734
Calculated MW	37206

Additional Information

Gene ID	22977
Other Names	Aflatoxin B1 aldehyde reductase member 3, 1.-.-.-, AFB1 aldehyde reductase 2, AFB1-AR 2, AKR7A3, AFAR2
Target/Specificity	This AKR7A3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 187-217 amino acids from the Central region of human AKR7A3.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AKR7A3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AKR7A3 (HGNC:390)
Function	Catalyzes the NADPH-dependent reduction of various carbonyl- containing compounds, including aldehydes, ketones, and toxic products from cellular metabolism or environmental exposure. Can reduce the dialdehyde form of aflatoxin B1 (AFB1) into alcohol derivatives, via monoaldehydes intermediates. Can reduce the dialdehyde form of aflatoxin B1 (AFB1) into

	alcohol derivatives, via monoaldehydes intermediates, thus preventing the formation of protein adducts that contribute to AFB1-induced toxicity.
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P38918}.
Tissue Location	Expressed in colon, kidney, liver, pancreas, adenocarcinoma and endometrium.

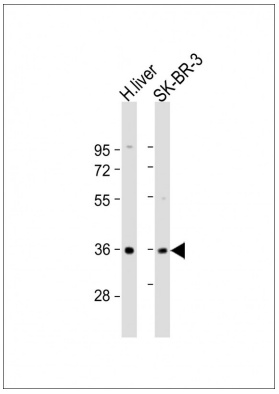
Background

Can reduce the dialdehyde protein-binding form of aflatoxin B1 (AFB1) to the non-binding AFB1 dialcohol. May be involved in protection of liver against the toxic and carcinogenic effects of AFB1, a potent hepatocarcinogen.

References

Knight L.P.,et al.Carcinogenesis 20:1215-1223(1999).
Praml C.,et al.Oncogene 22:4765-4773(2003).
Gregory S.G.,et al.Nature 441:315-321(2006).
Bodreddigari S.,et al.Chem. Res. Toxicol. 21:1134-1142(2008).

Images



All lanes : Anti-AKR7A3 Antibody (Center) at 1:2000 dilution Lane 1: human liver lysate Lane 2: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.