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AKR7A3 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21988c

Specification

AKR7A3 Blocking Peptide (Center) - Product Information

Primary Accession O95154

AKR7A3 Blocking Peptide (Center) - 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
The synthetic peptide sequence is selected from aa 207-217 of HUMAN AKR7A3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AKR7A3 Blocking Peptide (Center) - 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.

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AKR7A3 Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

AKR7A3 Blocking Peptide (Center) - Images

AKR7A3 Blocking Peptide (Center) - 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.

AKR7A3 Blocking Peptide (Center) - 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).