Full-Length

AKR1B10 (Human) Recombinant Protein (P01)

Catalog # H00057016-P01 Size 25 ug, 10 ug

Applications

Specification

Product Description	Human AKR1B10 full-length ORF (AAH08837, 1 a.a. - 316 a.a.) recombinant protein with GST-tag a t N-terminal.
Sequence	MATFVELSTKAKMPIVGLGTWKSPLGKVKEAVKVAIDAGYRHIDCAYVYQNEHEVGEAIQEKIQEK AVKREDLFIVSKLWPTFFERPLVRKAFEKTLKDLKLSYLDVYLIHWPQGFKSGDDLFPKDDKGNAI GGKATFLDAWEAMEELVDEGLVKALGVSNFSHFQIEKLLNKPGLKYKPVTNQAECHPYLTQEKLI QYCHSKGITVTAYSPLGSPDRPWAKPEDPSLLEDPKIKEIAAKHKKTAAQVLIRFHIQRNVIVIPKSV TPARIVENIQVFDFKLSDEEMATILSFNRNWRACNVLQSSHLEDYPFDAEY
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	60.50
Interspecies Antigen Sequence	Mouse (82); Rat (81)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — AKR1B10

Entrez GeneID	57016
GeneBank Accession#	BC008837
Protein Accession#	AAH08837
Gene Name	AKR1B10
Gene Alias	AKR1B11, AKR1B12, ALDRLn, ARL-1, ARL1, HIS, HSI, MGC14103
Gene Description	aldo-keto reductase family 1, member B10 (aldose reductase)
Omim ID	604707
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the aldo/keto reductase superfamily, which consists of more tha n 40 known enzymes and proteins. This member can efficiently reduce aliphatic and aromatic ald ehydes, and it is less active on hexoses. It is highly expressed in adrenal gland, small intestine, an d colon, and may play an important role in liver carcinogenesis. [provided by RefSeq
Other Designations	aldo-keto reductase family 1, member B10|aldo-keto reductase family 1, member B11 (aldose re ductase-like)|aldose reductase-like 1|aldose reductase-like peptide|aldose reductase-related prot ein|small intestine reductase

Publication Reference

- In vitro metabolism of a novel JNK inhibitor tanzisertib: interspecies differences in oxido-reduction and characterization of enzymes involved in metabolism.

  Atsriku C, Hoffmann M, Moghaddam M, Kumar G, Surapaneni S.

  Xenobiotica 2015 Jun; 45(6):465.

  Application: Enzyme, Human, Tanzisertib were incubated in human liver microsomes, cytosol and hepatocytes

Pathway

- Bisphenol A degradation
- Butanoate metabolism
- Fructose and mannose metabolism
- Linoleic acid metabolism
- Metabolic pathways
- Tetrachloroethene degradation

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Diabetic Nephropathies
- Diabetic Retinopathy
- Disease Progression
- Edema
- Genetic Predisposition to Disease