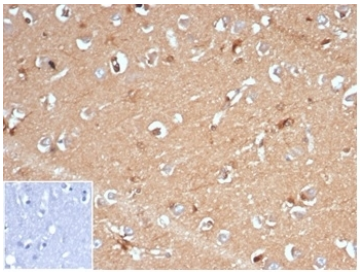
Recombinant AKR1B1 Antibody / Aldose reductase [clone AKR1B1/7009R] (V8987)

Catalog No.	Formulation	Size
V8987-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8987-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8987SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

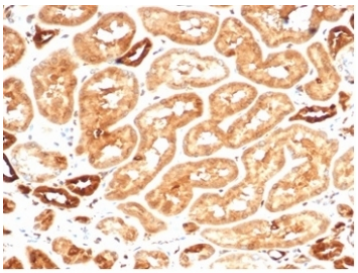
Recombinant RABBIT MONOCLONAL

Bulk quote request

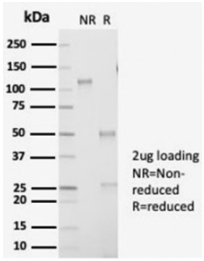
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AKR1B1/7009R
Purity	Protein A/G affinity
UniProt	P15121
Localization	Cytoplasm
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-4ug/ml
Limitations	This recombinant AKR1B1 antibody is available for research use only.



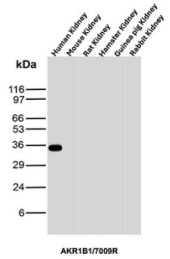
Recombinant AKR1B1 Antibody Brain Immunohistochemistry. IHC staining of FFPE human brain tissue with recombinant AKR1B1 antibody (clone AKR1B1/7009R) at 2ug/ml in PBS for 30 min RT. Negative control inset: PBS used instead of primary antibody to control for secondary Ab binding. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



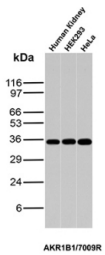
Recombinant AKR1B1 Antibody Kidney Immunohistochemistry. IHC staining of FFPE human kidney tissue with recombinant AKR1B1 antibody (clone AKR1B1/7009R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant AKR1B1 antibody (AKR1B1/7009R) as confirmation of integrity and purity.



Recombinant AKR1B1 Antibody Cross-Species WB. Western blot analysis of human, mouse, rat, hamster, guinea pig, and rabbit kidney tissue lysates using recombinant AKR1B1 Antibody clone AKR1B1/7009R. A distinct band is detected near approximately 35-40 kDa in human kidney tissue, consistent with the predicted molecular weight of Aldose reductase / AKR1B1, an oxidative stress-associated aldo-keto reductase family enzyme involved in reactive aldehyde detoxification, glucose-responsive signaling, and polyol pathway-associated metabolic regulation. Minimal signal is observed in the additional species tested under these experimental conditions.



Recombinant AKR1B1 Antibody Tissue and Cell Line WB. Western blot analysis of human kidney tissue together with HEK293 and HeLa cell lysates using recombinant AKR1B1 Antibody clone AKR1B1/7009R. Strong bands are detected near approximately 35-40 kDa across all samples, consistent with the predicted molecular weight of Aldose reductase / AKR1B1, an oxidative stress-associated aldo-keto reductase family enzyme involved in reactive aldehyde detoxification, glucose-responsive signaling, and polyol pathway-associated metabolic regulation.

Description

AKR1B1, also designated as aldose reductase, is a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This protein catalyzes the reduction of a number of aldehydes, including the aldehyde form of glucose, and is thereby implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. It has also been shown to have decreased expression in adrenocortical cancer, and possibly play a role in adrenal tumorigenesis. It has been suggested that AKR1B1 could be investigated as a marker of malignancy for adrenal tumor diagnosis.

For broader validation data and polyol pathway-associated metabolic signaling research applications, explore our Aldose Reductase Antibody / Polyol Pathway Marker page.

Application Notes

Optimal dilution of the recombinant AKR1B1 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length AKR1B1 protein was used as the immunogen for the recombinant AKR1B1 antibody.

Storage

Aliquot the recombinant AKR1B1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.