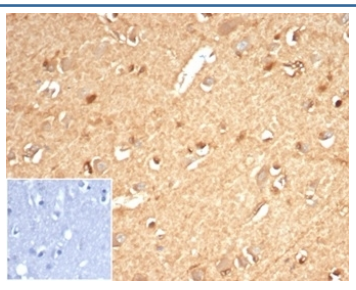
Recombinant Aldose reductase Antibody / AKR1B1 [clone AKR1B1/7010R] (V9399)

Catalog No.	Formulation	Size
V9399-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9399-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9399SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

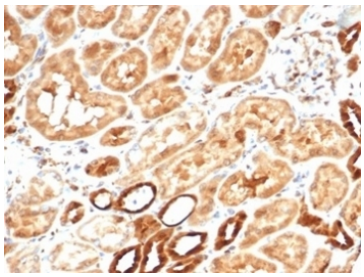
Recombinant RABBIT MONOCLONAL

Bulk quote request

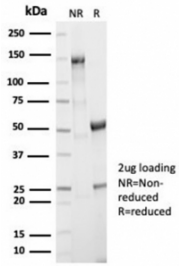
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	AKR1B1/7010R
Purity	Protein A/G affinity
UniProt	P15121
Localization	Cytoplasm
Applications	Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 2-4ug/ml
Limitations	This recombinant Aldose reductase antibody is available for research use only.



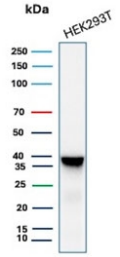
Recombinant Aldose reductase Antibody Brain IHC. Immunohistochemistry staining of FFPE human brain tissue with recombinant Aldose reductase antibody (clone AKR1B1/7010R) at 2ug/ml in PBS for 30 min RT. Negative control inset: PBS used instead of primary antibody to control for secondary Ab binding. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



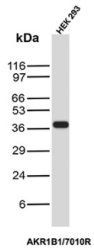
Recombinant Aldose reductase Antibody Kidney IHC. Immunohistochemistry staining of FFPE human kidney tissue with recombinant Aldose reductase antibody (clone AKR1B1/7009R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant Aldose reductase antibody (AKR1B1/7010R) as confirmation of integrity and purity.



Recombinant Aldose reductase Antibody 293T Cell WB. Western blot testing of human 293T cell lysate with recombinant Aldose reductase antibody (clone AKR1B1/7010R). Predicted molecular weight ~36 kDa.



Recombinant Aldose Reductase Antibody HEK293T WB. Western blot analysis of HEK293T cell lysate using recombinant Aldose reductase Antibody clone AKR1B1/7010R. A strong band is detected near approximately 35-40 kDa, consistent with the predicted molecular weight of Aldose reductase / AKR1B1, an aldo-keto reductase family enzyme involved in polyol pathway metabolism, oxidative stress regulation, and glucose-responsive cellular signaling pathways.

Description

Recombinant Aldose reductase Antibody specifically detects AKR1B1, 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.

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 Aldose reductase antibody should be determined by the researcher.

Immunogen

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

Storage

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