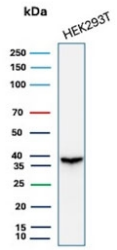
Recombinant Aldose reductase 1B1 Antibody / AKR1B1 [clone rAKR1B1/7296] (V9757)

Catalog No.	Formulation	Size
V9757-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9757-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9757SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

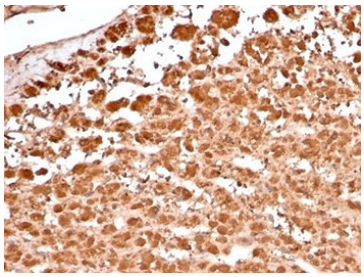
Recombinant | MOUSE MONOCLONAL

Bulk quote request

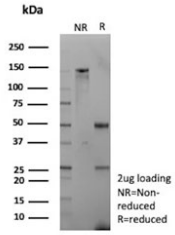
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rAKR1B1/7296
Purity	Protein A/G affinity
UniProt	P15121
Localization	Cytoplasm
Applications	Immunofluorescence : 1-2ug/ml Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant Aldose reductase 1B1 antibody is available for research use only.



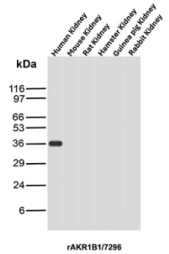
Recombinant Aldose reductase 1B1 Antibody WB. Western blot testing of human 293T cell lysate with recombinant Aldose reductase 1B1 antibody (clone rAKR1B1/7296). Predicted molecular weight ~36 kDa.



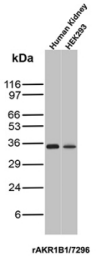
Recombinant Aldose reductase 1B1 Antibody Adrenal Gland IHC. Immunohistochemistry staining of FFPE human adrenal gland tissue with recombinant Aldose reductase 1B1 antibody (clone rAKR1B1/7296). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant Aldose reductase 1B1 antibody (clone rAKR1B1/7296) as confirmation of integrity and purity.



Recombinant Aldose Reductase Antibody Cross-Species WB. Western blot analysis of kidney tissue lysates from multiple species using recombinant Aldose reductase 1B1 Antibody clone rAKR1B1/7296. 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 aldo-keto reductase family enzyme involved in polyol pathway metabolism, oxidative stress regulation, and glucose-responsive cellular signaling pathways. Minimal signal is observed in the additional species tested under these experimental conditions.



Recombinant Aldose Reductase Antibody Kidney and HEK293T WB. Western blot analysis of human kidney tissue and HEK293T cell lysates using recombinant Aldose reductase 1B1 Antibody clone rAKR1B1/7296. Strong bands are detected near approximately 35-40 kDa in both samples, 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 1B1 Antibody 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. 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 Aldose reductase 1B1 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length protein was used as the immunogen for the recombinant Aldose reductase 1B1 antibody.

Storage

Aliquot the recombinant Aldose reductase 1B1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.