



Recombinant Protein Technical Manual

Recombinant Human AKR1B1 Protein (His Tag)

RPES1560

Product Data:

Product SKU: RPES1560

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: P15121

Protein Information:

Molecular Mass: 37.9 kDa

AP Molecular Mass: 36 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 20% glycerol, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: ADR;ALDR1;ALR2;AR;MGC1804

Immunogen Information:

Sequence: Met 1-Phe 316

Background:

Aldose reductase (AKR1B1) belongs to the aldo/keto reductase superfamily. AKR1B1 is a NADPH-dependent aldo-keto reductase best known as the rate-limiting enzyme of the polyol pathway. Expression of AKR1B1 was the highest in lens and retina. It is the first enzyme in the polyol pathway through which glucose is converted to sorbitol which is important for the function of various organs in the body, and has been implicated in the etiology of diabetic complications. AKR1B1 is quite abundant in the collecting tubule cells and thought to provide protection against hypertonic environment. Some human tissues contain AKR1B1 as well as AKR1B10, a closely related member of the aldo-keto reductase superfamily.