

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Aldo-keto Reductase 1C3/AKR1C3 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) AKR1C1 is observed, and approximately 25% cross-reactivity with rhAKR1C4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Aldo-keto Reductase 1C3/AKR1C3 Met1-Tyr323 Accession # P42330
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

AKR1C3 (Aldo-Keto Reductase family 1 member C3; also 17-βHSD 5, prostaglandin F synthase/PGFS and 3-αHSD type 2) is a 35-36 kDa member of the four gene 3-αHSD family, aldo-keto reductase superfamily of enzymes. It is expressed by multiple cell types, including prostate epithelium, T cells, and hepatocytes. AKR1C3 generates testosterone and progesterone, catalyzes the conversion of aldehydes and ketones into alcohols, and the mediates the reduction of prostaglandin D2 into PGF2. Human AKR1C3 is 323 amino acids (aa) in length. There are three potential isoform variants. One contains an alternative start site at Met120, a second shows a five aa substitution for aa 1-28, and a third possesses a 15 aa substitution for aa 124-323. Full-length human AKR1C3 shares 73% aa sequence identity with mouse AKR1C3.

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