

# Human Aldo-keto Reductase 1C3/AKR1C3 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7678

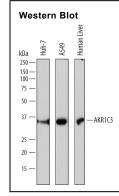
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Aldo-keto Reductase 1C3/AKR1C3 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) AKR1C1 is observed, and approximately 25% cross-reactivity with rhAKR1C4 is observed.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	E. coli-derived recombinant human Aldo-keto Reductase 1C3/AKR1C3 Met1-Tyr323 Accession # P42330		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

#### 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.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	See Below

## DATA



Detection of Human Aldo-keto Reductase 1C3/AKR1C3 by Western Blot. Western blot shows lysates of Huh-7 human hepatoma cell line, A549 human lung carcinoma cell line, and human liver tissue. PVDF membrane was probed with 0.1 µg/mL of Sheep Anti-Human Aldo-keto Reductase 1C3/AKR1C3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7678) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Aldo-keto Reductase 1C3/AKR1C3 at approximately 35-36 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunobiot Buffer Group 1.

#### PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.2 mg/mL.

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

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

### Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
   6 months, -20 to -70 °C under sterile conditions after reconstitution.

#### 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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