

DESCRIPTION

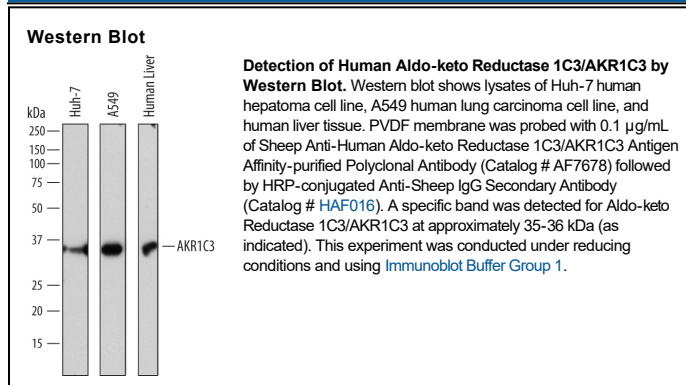
Species Reactivity	Human
Specificity	Detects human Aldo-keto Reductase 1C3/AKR1C3 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) AKR1C1 is observed, and approximately 25% cross-reactivity with rhAKR1C4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Aldo-keto Reductase 1C3/AKR1C3 Met1-Tyr323 Accession # P42330
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



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. <ul style="list-style-type: none"> • 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 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.