

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.                     |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Aldo-keto Reductase 1C3/AKR1C3<br>Met1-Tyr323<br>Accession # P42330                                                                                                                                                               |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

#### PRODUCT SPECIFIC NOTICES

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