

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                    |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Aldehyde Oxidase 1/AOX1 in direct ELISAs and Western blots.                                |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                                      |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Aldehyde Oxidase 1/AOX1<br>Asn302-Ser531<br>Accession # Q06278 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                          |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

AOX1 (Aldehyde oxidase 1; also AO and initially termed xanthine dehydrogenase/oxidase) is a 145-150 kDa member of the large molybdo-flavo family of enzymes. It is a homodimer widely expressed in cells such as hepatocytes, bronchial and intestinal epithelium and adrenal cortex. It is suggested to oxidize cyclic aldehydes to carboxylic acids and likely converts retinal to retinoic acid, gentistate aldehyde to gentisate and methylmalonate semialdehyde into methylmalonate. Human AOX1 is 1338 amino acids (aa) in length. It contains a 25 kDa N-terminal region that possesses two Fe/S redox centers (aa 5-162), a 40 kDa flavin-containing domain (aa 236-421), and an 85 kDa C-terminal region that contains a molybdenum cofactor and substrate-binding segment (aa 711-1245). One isoform shows a two aa substitution for aa 354-356. Over aa 302-531, human AOX1 shares 82% aa identity with mouse AOX1.

#### PRODUCT SPECIFIC NOTICES

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