

DESCRIPTION

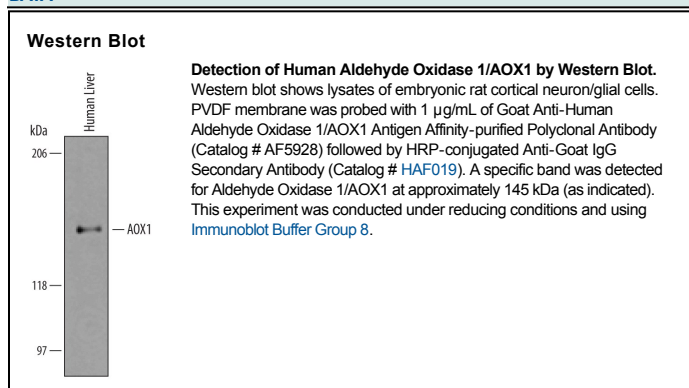
Species Reactivity	Human
Specificity	Detects human Aldehyde Oxidase 1/AOX1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Aldehyde Oxidase 1/AOX1 Asn302-Ser531 Accession # Q06278
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

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.