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Product datasheet for AP20103BT-N

Alcohol Oxidase Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ID, IF, IP, R, WB
Recommended Dilution:	This product is intended for use in precipitating and non-precipitating antibody-binding assays such as e.g., ELISA and Western blotting and Immunofluorescence or Histochemical techniques (1/1,000-1/40,000).
Reactivity:	Candida
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Alcohol dehydrogenase isolated and purified from *Candida boidinii*. Freund's complete adjuvant is used in the first step of the immunization procedure.
Specificity:	The reagents were evaluated for potency, purity and specificity using most or all of the following techniques: Immunoelectrophoresis, Cross-Immunoelectrophoresis, single Radial Immunodiffusion (Ouchterlony), block titration, ELISA, Immunoblotting and Enzyme Inhibition. Cross-reactivities against enzymes of other sources may occur but have not been determined. Recognizes Alcohol Oxidase.
Formulation:	PBS, pH 7.2 without preservatives and foreign proteins. Label: Biotin State: Lyophilized IgG fraction. Label: **Conjugation Procedure:** A proprietary technique for the binding to biotin is used, followed by several purification steps. After each step activity and specificity are tested in a variety of techniques. The conjugate is lyophilized to assure stability and long shelf life Molar radio: ~4.6
Reconstitution Method:	Restore by adding 1.0 ml of sterile distilled water.
Concentration:	lot specific
Purification:	Ammonium Sulphate Precipitation and Ion Exchange Chromatography.
Conjugation:	Biotin

Storage: Store the antibody lyophilized at 2-8°C and reconstituted at 2-8°C for one week or (in aliquots) at -20°C for longer.
If a slight precipitation occurs upon storage, this should be removed by centrifugation.

Stability: Shelf life: one year from despatch.

Database Link: Q00922

Background: Alcohol Oxidase (AOX) is a homooctameric flavoprotein consisting of eight identical subunits of ~74 kD, each containing a flavin adenine dinucleotide molecule (FAD) as a prosthetic group (van der Klei et al., 1991). The protein catalyzes the oxidation of methanol to formaldehyde and hydrogen peroxide, the first step in the methanol utilization pathway of certain yeasts including *Pichia pastoris*, *Hansenula polymorpha*, and *Candida boidinii* (van der Klei et al., 1991). AOX is normally localized in the matrix of single membrane-bound organelles called peroxisomes. During methanol growth, the peroxisomes also contain large amounts of dihydroxyacetone synthase, the first enzyme in the methanol assimilatory pathway, and catalase (CAT), which converts the hydrogen peroxide generated by oxidases such as AOX into water and oxygen (Veenhuis and Harder, 1991). As a result, peroxisomes, which are small and few in number in glucose-grown cells, are massively induced in methanol-grown cells (Veenhuis and Harder, 1991).

Synonyms: AOX, Methanol Oxidase, MOX, AOD1