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XDH Recombinant Rabbit mAb

Catalog # AP100025

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P47989
Other Accession	P47989
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	146424
Physical State	Liquid
Immunogen	A synthesized peptide derived from human Xanthine oxidase
Epitope Specificity	202-300
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the xanthine dehydrogenase family.Contains 1 2Fe-2S ferredoxin-type domain.Contains 1 FAD-binding PCMH-type domain.
SUBUNIT	Homodimer. Interacts with BTN1A1.
Post-translational modifications	Subject to partial proteolysis; this alters the enzyme from the dehydrogenase form (D) to the oxidase form (O) (By similarity).Contains sulfhydryl groups that are easily oxidized (in vitro); this alters the enzyme from the dehydrogenase form (D) to the oxidase form (O) (By similarity).
DISEASE	Defects in XDH are the cause of xanthinuria type 1 (XU1) [MIM:278300]. Xanthinuria is characterized by excretion of very large amounts of xanthine in the urine and a tendency to form xanthine stones. Uric acid is strikingly diminished in serum and urine. XU1 is due to isolated xanthine dehydrogenase. XU1 patients can metabolize allopurinol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Key enzyme in purine degradation. Catalyzes the oxidation of hypoxanthine to xanthine. Catalyzes the oxidation of xanthine to uric acid. Contributes to the generation of reactive oxygen species. Has also low oxidase activity towards aldehydes (in vitro).

Additional Information

Gene ID	7498
Other Names	XAN1; XDH/XO; XO; XOR; Xox-1; Xox1; XDH_HUMAN; XDH; XDHA; XDH_MOUSE; XDH_RAT; xanthine dehydrogenase; xanthene dehydrogenase; xanthine dehydrogenase/oxidase; xanthine oxidase; xanthine oxidoreductase
Dilution	WB=1:500-2000,IHC-P=1:50-200,IHC-F=1:50-200,IF=1:50-200,Flow-Cyt=1:50-100

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	XDH
Synonyms	XDHA
Function	Key enzyme in purine degradation. Catalyzes the oxidation of hypoxanthine to xanthine. Catalyzes the oxidation of xanthine to uric acid. Contributes to the generation of reactive oxygen species. Has also low oxidase activity towards aldehydes (in vitro).
Cellular Location	Cytoplasm. Peroxisome. Secreted
Tissue Location	Detected in milk (at protein level). {ECO:0000269|Ref.12}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.