

Basic Information

Product Name	Anti-XDH Antibody	
Gene Name	XDH	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human XDH recombinant protein (Position: R439-R794). Human XDH shares 90.4% amino acid (aa) sequence identity with mouse XDH.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	146 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

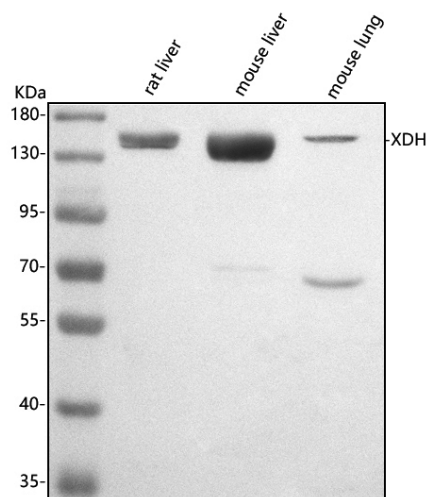
12 months from date of receipt, -20°C as supplied.

Background Information

Xanthine dehydrogenase, also known as XDH, is a protein that, in humans, is encoded by the XDH gene. Xanthine dehydrogenase belongs to the group of molybdenum-containing hydroxylases involved in the oxidative metabolism of purines. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Xanthine dehydrogenase can be converted to xanthine oxidase by reversible sulfhydryl oxidation or by irreversible proteolytic modification. Defects in xanthine dehydrogenase cause xanthinuria, may contribute to adult respiratory stress syndrome, and may potentiate influenza infection through an oxygen

metabolite-dependent mechanism.

Selected Validation Data



Western blot analysis of anti-XDH antibody (A01884-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat liver tissue lysates,

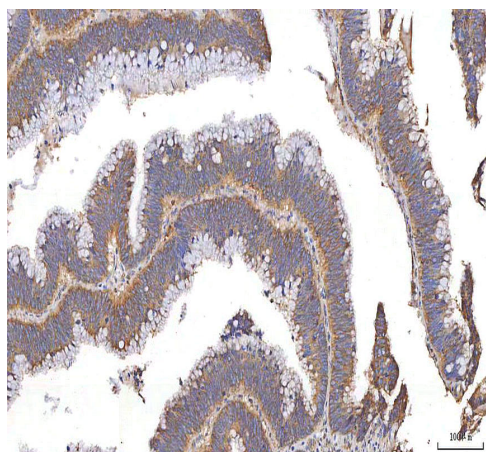
Lane 2: mouse liver tissue lysates,

Lane 3: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

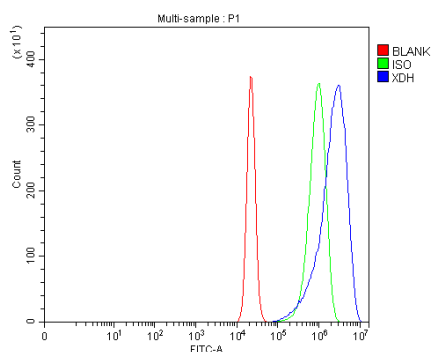
Then the membrane was incubated with rabbit anti-XDH antigen affinity purified polyclonal antibody (A01884-2) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054).

The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for XDH at approximately 150 kDa. The expected band size for XDH is at 146, 147-150 kDa.



IHC analysis of XDH using anti-XDH antibody (A01884-2).

XDH was detected in a paraffin-embedded section of human colon adenocarcinoma tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of RT4 cells using anti-XDH antibody (A01884-2).

Overlay histogram showing RT4 cells stained with A01884-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer.

The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-XDH Antibody (A01884-2, 1:100).

Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.