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XDH Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9277A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P47989
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23202
Calculated MW	146424
Antigen Region	206-234

Additional Information

Gene ID	7498
Other Names	Xanthine dehydrogenase/oxidase, Xanthine dehydrogenase, XD, Xanthine oxidase, XO, Xanthine oxidoreductase, XOR, XDH, XDHA
Target/Specificity	This XDH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 206-234 amino acids from the N-terminal region of human XDH.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	XDH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

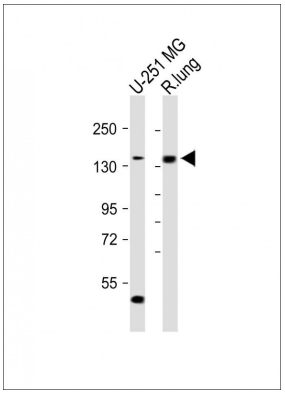
Background

XDH belongs to the group of molybdenum-containing hydroxylases involved in the oxidative metabolism of purines. The enzyme is a homodimer. This protein 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.

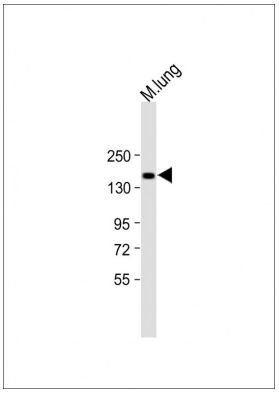
References

Ross,C.J., et.al., Nat. Genet. 41 (12), 1345-1349 (2009)
Taibi,G., et.al., J. Cell. Biochem. 108 (3), 688-692 (2009)
Spiekermann,S., et.al., Eur. Respir. J. 34 (1), 276 (2009)

Images

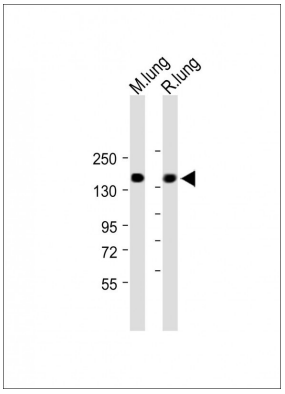


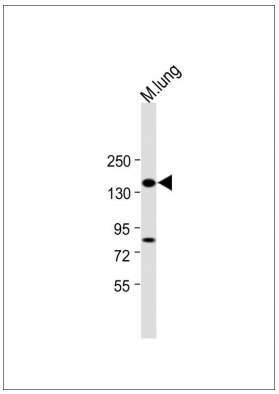
All lanes : Anti-XDH Antibody (N-term) at 1:500-1:1000 dilution Lane 1: U-251 MG whole cell lysate Lane 2: rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.



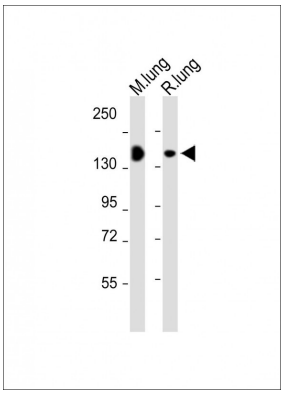
All lanes : Anti-XDH Antibody (N-term) at 1:1000 dilution Lane 1: mouse lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-XDH Antibody (N-term) at 1:1000 dilution Lane 1: mouse lung tissue tissue lysate Lane 2: rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

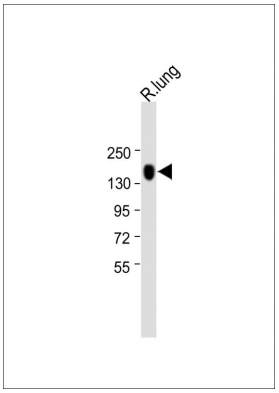




All lanes : Anti-XDH Antibody (N-term) at 1:1000 dilution Lane 1: mouse lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated(ASP1615) at 1/15000 dilution. Observed band size : 160kDa Blocking/Dilution buffer: 5% NFDM/TBST.

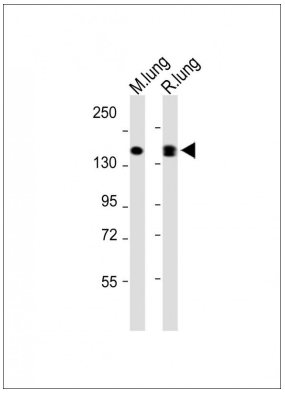


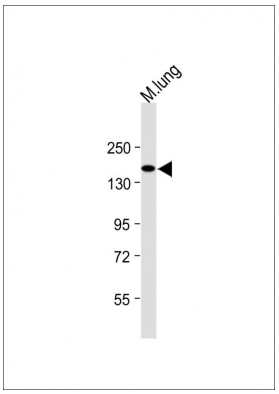
All lanes : Anti-XDH Antibody (N-term) at 1:2000 dilution Lane 1: mouse lung tissue lysate Lane 2: rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.



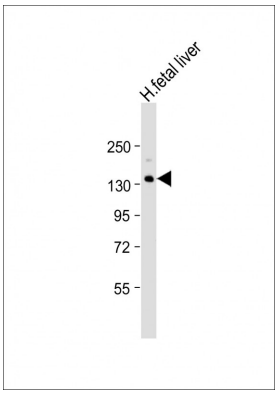
All lanes : Anti-XDH Antibody (N-term) at 1:1000 dilution Lane 1:rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-XDH Antibody (N-term) at 1:2000 dilution Lane 1:mouse lung tissue lysate Lane 2:rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

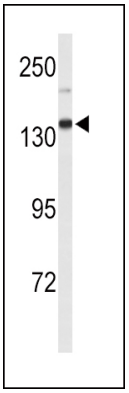




All lanes : Anti-XDH Antibody (N-term) at 1:2000 dilution Lane 1: mouse lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

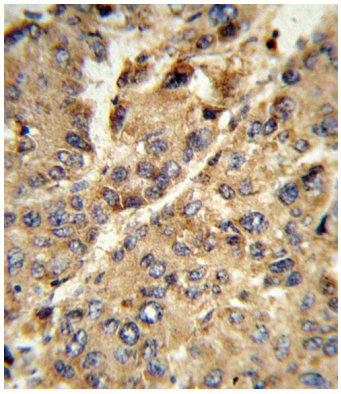


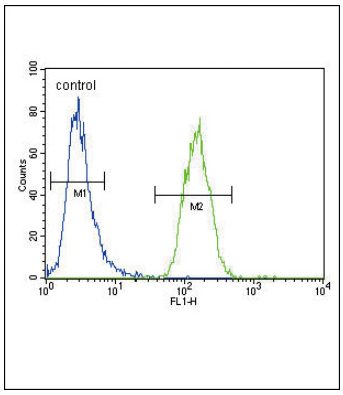
Anti-XDH Antibody (N-term) at 1:1000 dilution + human fetal liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 146 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of XDH Antibody (N-term) (Cat. #AP9277a) in mouse lung tissue lysates (35ug/lane). XDH (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with XDH Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





XDH Antibody (N-term) (Cat. #AP9277a) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.