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ADI1 Polyclonal Antibody

Catalog # AP74185

Product Information

Application	IHC-P
Primary Accession	Q9BV57
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21498

Additional Information

Gene ID	55256
Other Names	1, 2-dihydroxy-3-keto-5-methylthiopentene dioxygenase (EC 1.13.11.54) (Acireductone dioxygenase (Fe(2+)-requiring)) (ARD) (Fe-ARD) (Membrane-type 1 matrix metalloproteinase cytoplasmic tail-binding protein 1) (MTCBP-1) (Submergence-induced protein-like factor) (Sip-L)
Dilution	IHC-P~~IHC-p 1:50-200, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

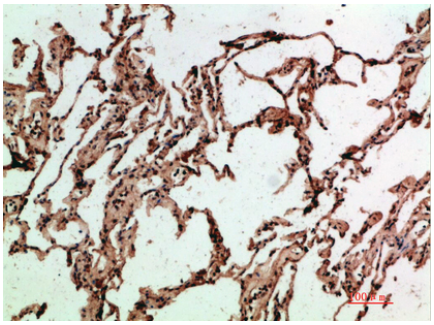
Name	ADI1 {ECO:0000255|HAMAP-Rule:MF_03154}
Function	Catalyzes 2 different reactions between oxygen and the acireductone 1,2-dihydroxy-3-keto-5-methylthiopentene (DHK-MTPene) depending upon the metal bound in the active site (By similarity). Fe- containing acireductone dioxygenase (Fe-ARD) produces formate and 2- keto-4-methylthiobutyrate (KMTB), the alpha-ketoacid precursor of methionine in the methionine recycle pathway (PubMed:15938715). Ni- containing acireductone dioxygenase (Ni-ARD) produces methylthiopropionate, carbon monoxide and formate, and does not lie on the methionine recycle pathway (By similarity). Also down-regulates cell migration mediated by MMP14 (PubMed:14718544). Necessary for hepatitis C virus replication in an otherwise non-permissive cell line (PubMed:11602742).
Cellular Location	Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Localizes to the plasma membrane when complexed to MMP14.

Tissue Location	Detected in heart, colon, lung, stomach, brain, spleen, liver, skeletal muscle and kidney

Background

Catalyzes the formation of formate and 2-keto-4- methylthiobutyrate (KMTB) from 1,2-dihydroxy-3-keto-5-methylthiopentene (DHK-MTPene). Also down-regulates cell migration mediated by MMP14. Necessary for hepatitis C virus replication in an otherwise non-permissive cell line.

Images



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:200