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PRODH Rabbit pAb

Catalog # AP97196

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	O43272
Other Accession	O43272
Reactivity	Mouse
Predicted	Rat, Human, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68029
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PRODH
Epitope Specificity	141-240/600
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the proline oxidase family.
DISEASE	Defects in PRODH are the cause of hyperprolinemia type 1 (HP-1) [MIM:239500]. HP-1 is a disorder characterized by elevated serum proline levels. May be involved in the psychiatric and behavioral phenotypes associated with the 22q11 velocardiofacial and DiGeorge syndrome.Defects in PRODH are associated with susceptibility to schizophrenia type 4 (SCZD4) [MIM:600850]. A complex, multifactorial psychotic disorder or group of disorders characterized by disturbances in the form and content of thought (e.g. delusions, hallucinations), in mood (e.g. inappropriate affect), in sense of self and relationship to the external world (e.g. loss of ego boundaries, withdrawal), and in behavior (e.g bizarre or apparently purposeless behavior). Although it affects emotions, it is distinguished from mood disorders in which such disturbances are primary. Similarly, there may be mild impairment of cognitive function, and it is distinguished from the dementias in which disturbed cognitive function is considered primary. Some patients manifest schizophrenic as well as bipolar disorder symptoms and are often given the diagnosis of schizoaffective disorder.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Proline oxidase catalyzes the conversion of proline to pyrroline-5-carboxylate, or P5C during the degradation of the amino acid Proline. Defects in PRODH are the cause of hyperprolinemia type 1, a disorder characterized by elevated serum proline levels. Defective PRODH may be involved in the psychiatric and behavioral phenotypes associated with the 22q11 velocardiofacial and DiGeorge syndrome and may be associated with susceptibility to schizophrenia 4 (SCZD4).

Additional Information

Gene ID	5625
Other Names	HSPOX2; PIG6; POX; PRODH1; TP53I6; Pro-1; Pro1; Ym24d07; PROD_HUMAN; PRODH; Proline oxidase; Proline oxidase 2; p53-induced gene 6 protein; 1.5.5.2; POX2; PRODH2; PROD_MOUSE; proline dehydrogenase 1; proline dehydrogenase (proline oxidase); p53 Inducible gene 6
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	PRODH (HGNC:9453)
Function	Converts proline to delta-1-pyrroline-5-carboxylate.
Cellular Location	Mitochondrion matrix.
Tissue Location	Expressed in lung, skeletal muscle and brain, to a lesser extent in heart and kidney, and weakly in liver, placenta and pancreas

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