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PON1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10684c

Product Information

Application	FC, IHC-P, WB, E
Primary Accession	P27169
Other Accession	NP_000437.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28448
Calculated MW	39731
Antigen Region	118-145

Additional Information

Gene ID	5444
Other Names	Serum paraoxonase/arylesterase 1, PON 1, Aromatic esterase 1, A-esterase 1, K-45, Serum aryldialkylphosphatase 1, PON1, PON
Target/Specificity	This PON1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 118-145 amino acids from the Central region of human PON1.
Dilution	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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	PON1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PON1
Synonyms	PON

Function	Hydrolyzes the toxic metabolites of a variety of organophosphorus insecticides. Capable of hydrolyzing a broad spectrum of organophosphate substrates and lactones, and a number of aromatic carboxylic acid esters. Mediates an enzymatic protection of low density lipoproteins against oxidative modification and the consequent series of events leading to atheroma formation.
Cellular Location	Secreted, extracellular space.
Tissue Location	Plasma, associated with HDL (at protein level). Expressed in liver, but not in heart, brain, placenta, lung, skeletal muscle, kidney or pancreas.

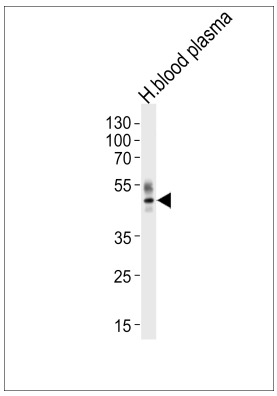
Background

The enzyme encoded by this gene is an arylesterase that mainly hydrolyzes paroxon to produce p-nitrophenol. Paroxon is an organophosphorus anticholinesterase compound that is produced in vivo by oxidation of the insecticide parathion. Polymorphisms in this gene are a risk factor in coronary artery disease. The gene is found in a cluster of three related paraoxonase genes at 7q21.3.

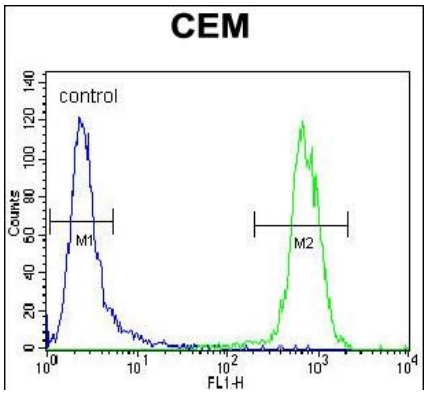
References

Ergun, M.A., et al. Biochem. Genet. (2010) In press :
Cagirci, G., et al. J. Heart Valve Dis. 19(4):453-458(2010)
Mendonca, M.I., et al. Rev Port Cardiol 29(4):571-580(2010)
Hashemi, M., et al. Genet. Mol. Res. 9(3):1735-1741(2010)
Martinez, C., et al. BMC Neurol 10, 71 (2010) :

Images

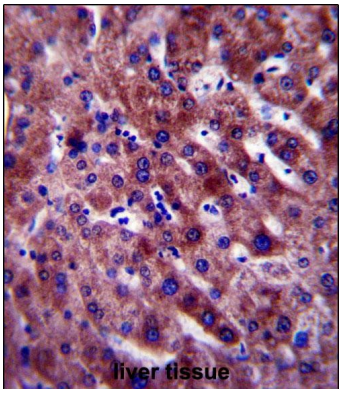


Western blot analysis of lysate from human blood plasma tissue lysate, using PON1 Antibody (Center)(Cat. #AP10684c). AP10684c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



PON1 Antibody (Center) (Cat. #AP10684c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PON1 Antibody (Center) (Cat. #AP10684c)immunohistochemistry analysis in formalin



fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PON1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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