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PON2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5760c

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q15165
Other Accession	NP_000296.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21504
Calculated MW	39381
Antigen Region	74-101

Additional Information

Gene ID	5445
Other Names	Serum paraoxonase/arylesterase 2, PON 2, Aromatic esterase 2, A-esterase 2, Serum aryldialkylphosphatase 2, PON2
Target/Specificity	This PON2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 74-101 amino acids from the Central region of human PON2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 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	PON2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PON2
Function	Capable of hydrolyzing lactones and a number of aromatic carboxylic acid esters. Has antioxidant activity. Is not associated with high density

	lipoprotein. Prevents LDL lipid peroxidation, reverses the oxidation of mildly oxidized LDL, and inhibits the ability of MM-LDL to induce monocyte chemotaxis.
Cellular Location	Membrane; Peripheral membrane protein
Tissue Location	Widely expressed with highest expression in liver, lung, placenta, testis and heart.

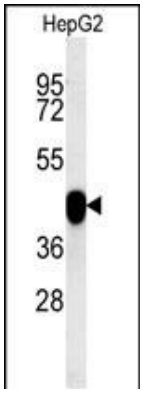
Background

PON2 is a member of the paraoxonase gene family, which includes three known members located adjacent to each other on the long arm of chromosome 7. The encoded protein is ubiquitously expressed in human tissues, membrane-bound, and may act as a cellular antioxidant, protecting cells from oxidative stress. Hydrolytic activity against acylhomoserine lactones, important bacterial quorum-sensing mediators, suggests the encoded protein may also play a role in defense responses to pathogenic bacteria. Mutations in this gene may be associated with vascular disease and a number of quantitative phenotypes related to diabetes.

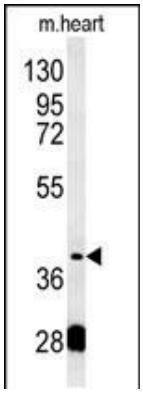
References

Sanghera, D.K., et al. Am. J. Hum. Genet. 62(1):36-44(1998)
Hegele, R.A., et al. J. Clin. Endocrinol. Metab. 82(10):3373-3377(1997)
Primo-Parmo, S.L., et al. Genomics 33(3):498-507(1996)

Images

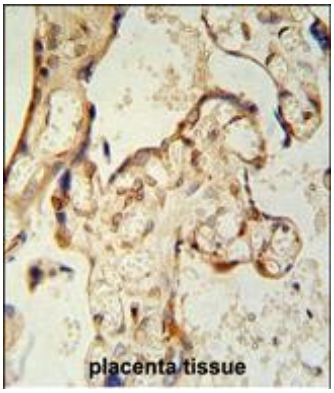


PON2 Antibody (Center) (Cat. #AP5760c) western blot analysis in HepG2 cell line lysates (15ug/lane).This demonstrates the PON2 antibody detected PON2 protein (arrow).

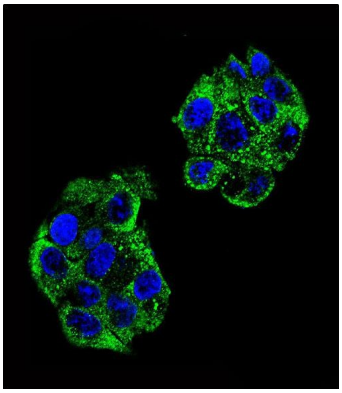


PON2 Antibody (Center) (Cat. #AP5760c) western blot analysis in mouse heart tissue lysates (15ug/lane).This demonstrates the PON2 antibody detected PON2 protein (arrow).

PON2 antibody(Center) (Cat. #AP5760c) immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by



peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PON2 antibody(Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of PON2 Antibody (Center)(Cat#AP5760c) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).