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# PON2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12952a

## Product Information

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| **Application** | WB, IHC-P, FC, E |
| **Primary Accession** | Q15165 |
| **Other Accession** | NP_000296.2 |
| **Reactivity** | Human |
| **Predicted** | Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB31960 |
| **Calculated MW** | 39381 |
| **Antigen Region** | 79-107 |

## Additional Information

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| **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 79-107 amino acids from the N-terminal region of human PON2. |
| **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 0.09% (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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | PON2 |
| **Function** | Capable of hydrolyzing lactones and a number of aromatic carboxylic acid |

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| | 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. |

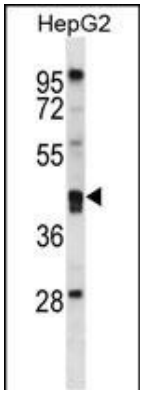
## Background

This gene encodes 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. Alternatively spliced transcript variants encoding different isoforms have been described.

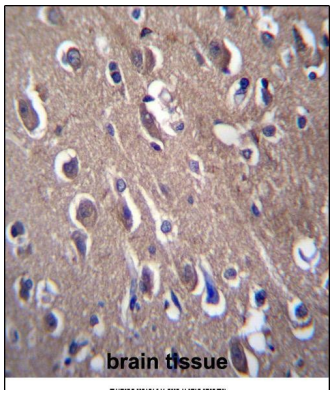
## References


Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Altenhofer, S., et al. J. Biol. Chem. 285(32):24398-24403(2010)
Ticozzi, N., et al. Ann. Neurol. 68(1):102-107(2010)
Wang, Y., et al. Diabet. Med. 27(4):376-383(2010)
Cross, D.S., et al. BMC Genet. 11, 51 (2010) :

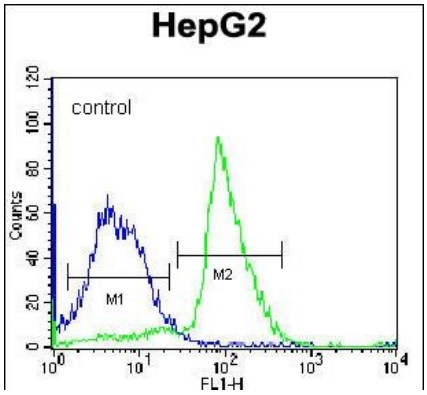

## Images




PON2 Antibody (N-term) (Cat. #AP12952a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the PON2 antibody detected the PON2 protein (arrow).




PON2 Antibody (N-term) (Cat. #AP12952a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PON2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.




PON2 Antibody (N-term) (Cat. #AP12952a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

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