

Rabbit anti-Mouse, Rat PON1 Polyclonal Antibody | anti-PON1 antibody

Anti-PON1 Antibody

CATALOG # AAA124905	HOST Rabbit	REACTIVITY Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

PON1; Polyclonal Antibody; Anti-PON1 Antibody; Serum paraoxonase/arylesterase 1; PON 1; Paraoxonase 1; anti-PON1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	355
Applicable Applications for anti-PON1 antibody	ELISA (Direct ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived rat PON1 recombinant protein (Position: A30-D274).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of PON1 using anti-PON1 antibody. PON1 was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PON1 antibody. PON1 was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PON1 antibody. PON1 was detected in paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PON1 Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PON1 using anti-PON1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PON1 antigen affinity purified polyclonal antibody at 0.5 ug/ml overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PON1 at approximately 43KD. The expected band size for PON1 is at 40KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PON1 antibody	Description: Rabbit IgG polyclonal antibody for PON1 detection. Tested with WB, IHC-P, Direct ELISA in Mouse; Rat. Background: Serum paraoxonase/arylesterase 1 (PON1), also known as aromatic esterase 1, is an enzyme that in humans is encoded by the PON1 gene. It is mapped to 7q21.3. This gene has esterase and more specifically paraoxonase activity. PON1 is responsible for hydrolysing organophosphate pesticides and nerve gasses. Polymorphisms in the PON1 gene significantly affect the catalytic ability of the enzyme. PON1 (paraoxonase 1) is also a major anti-atherosclerotic component of high-density lipoprotein (HDL). The PON1 gene is activated by PPAR-gamma, which increases synthesis and release of paraoxonase 1 enzyme from the liver, reducing atherosclerosis.
References	1. Costa LG, Cole TB, Vitalone A, Furlong CE (2005). "Measurement of paraoxonase (PON1) status as a potential biomarker of susceptibility to organophosphate toxicity". CLINICA CHIMICA ACTA 352 (1-2): 37-47. 2. Khateeb J, Gantman A, Kreitenberg AJ, Aviram M, Fuhrman B (January 2010). "Paraoxonase 1 (PON1) expression in hepatocytes is upregulated by pomegranate polyphenols: a role for PPAR-gamma pathway". Atherosclerosis 208 (1): 119-25. 3. Primo-Parmo SL, Sorenson RC, Teiber J, La Du BN (May 1996). "The human serum paraoxonase/arylesterase gene (PON1) is one member of a multigene family". Genomics 33 (3): 498-507.

NCBI AND UNIPROT INFORMATION

NCBI GI #	54292130
NCBI GeneID	84024
NCBI Accession #	NP_114466.1
NCBI GenBank Nucleotide #	NM_032077.1
UniProt Accession #	P55159; O08682; Q5BJN6
Molecular Weight	39,358 Da
NCBI Official Full Name	serum paraoxonase/arylesterase 1
NCBI Official Synonym Full Names	paraoxonase 1
NCBI Official Symbol	Pon1
NCBI Protein Information	serum paraoxonase/arylesterase 1
UniProt Protein Name	Serum paraoxonase/arylesterase 1

UniProt Gene Name	Pon1
UniProt Synonym Gene Names	Pon; PON 1; A-esterase 1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pon1-antibody-direct-elisa-immunohistochemistry-western-blot-elisa/124905>