

Anti-PON1 Antibody

Catalog # ABO11563

Specification

Anti-PON1 Antibody - Product Information

ApplicationWBPrimary AccessionP27169HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Serum paraoxonase/arylesterase 1(PON1) detection. Testedwith WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PON1 Antibody - Additional Information

Gene ID 5444

Other Names Serum paraoxonase/arylesterase 1, PON 1, 3.1.1.2, 3.1.1.81, 3.1.8.1, Aromatic esterase 1, A-esterase 1, K-45, Serum aryldialkylphosphatase 1, PON1, PON

Calculated MW 39731 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Secreted, extracellular space.

Tissue Specificity Plasma, associated with HDL (at protein level). Expressed in liver, but not in heart, brain, placenta, lung, skeletal muscle, kidney or pancreas.

Protein Name Serum paraoxonase/arylesterase 1

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human PON1(186-201aa FLDPYLQSWEMYLGLA), different from the related mouse and rat sequences by three amino acids.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the paraoxonase family.

Anti-PON1 Antibody - 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.

Anti-PON1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PON1 Antibody - Images

1 2 3 4 5 6 7 8 9 116KD – 97KD – 58KD – 40KD – 29KD – 20KD – 14KD –

Anti-PON1 antibody, ABO11563, All Western blottingAll lanes: Anti-PON1(ABO11563) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 40ugLane 2: Rat Lung Tissue Lysate at 40ugLane 3: Human Placenta Tissue Lysate at 40ugLane 4: Rat Testis Tissue Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: HEPA Whole Cell Lysate at 40ugLane 7: A549 Whole Cell Lysate at 40ugLane 8: JURKAT Whole Cell Lysate at 40ugLane 9: SKOV Whole Cell Lysate at 40ugPredicted bind size: 40KDObserved bind size: 40KD

Anti-PON1 Antibody - 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.