

BACKGROUND

PON1 (arylesterase/paraoxonase) is a polymorphic enzyme closely associated with high-density lipoproteins (HDL). It is located on chromosome 7 along with 2 other paraoxanase genes, PON2 and PON3. It is a 355 amino acid, 43 kDa glycoprotein produced in the liver and secreted into the bloodstream. Gene polymorphisms occur in both coding and non-coding regions. Two major polymorphisms in the coding region are L55M and Q192R. Q192R polymorphisms result in three major functional phenotypes Q/Q, Q/R and RR. PON1 hydrolyses organophosphates and prevents the oxidation of low-density lipoproteins (LDL). It may inhibit the progression of atherosclerosis by inhibition of LDL oxidation. Levels of PON1 in serum vary among individuals and are decreased in chronic renal failure, liver cirrhosis, diabetes, peripheral neuropathy, and familial hypercholesterolemia.

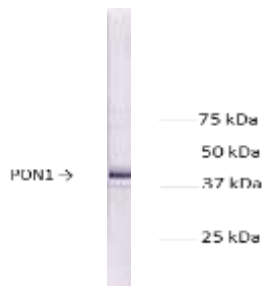
PRODUCT CHARACTERISTICS

Specificity:	Human PON1
Source:	Murine monoclonal IgG ₁
Purification:	Protein G purified from serum-free hybridoma culture supernatant
Immunogen:	Partially purified PON1 from human plasma
Formulation:	100 µg in PBS. No preservatives added

STORAGE

Store at -10 °C or below. Repetitive freezing and thawing is not recommended (aliquot as necessary). Thawed material may be stored at 4°C for short-term usage.

APPLICATIONS

Western Blot:

Following electrophoresis, PON1 protein from human plasma was blotted onto nitrocellulose membrane and incubated with 4 µg/ml of Anti-PON1 Clone KRJ1. An alkaline phosphatase-labeled goat anti-mouse IgG was used as a secondary antibody and NBT/BCIP as substrate solution to develop signal. PON1 protein band was observed at approximately 43 kDa.

Conditions for applications such as immunoprecipitation, EIA and immunofluorescence assays must be determined experimentally by the investigator. Antibody dilutions should be prepared using buffers containing suitable protein in order to stabilize antibody activity.

This product is intended for research, product development, quality assurance or manufacturing use. Not for use in the screening, diagnosis or prognosis of disease.

This product was manufactured in a facility which has a Quality Management System that is ISO 13485 certified.

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