

DESCRIPTION

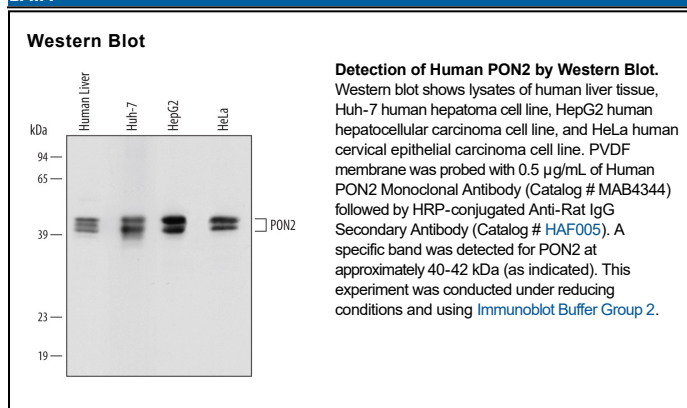
Species Reactivity	Human
Specificity	Detects endogenous human PON2 in Western blots. In Western blots, this antibody does not cross-react with recombinant human (rh) PON1 or rhPON3.
Source	Monoclonal Rat IgG _{2A} Clone # 453709
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PON2 Ala30-Leu354 Accession # NP_000296
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The paraoxonase (PON) gene family of antioxidant enzymes includes three known members located adjacent to each other on chromosome 7. Paraoxonase/arylesterase 2 (PON2) is a 354 amino acid, 39 kDa protein that is widely expressed in a variety of tissues and may act as a cellular antioxidant, protecting cells from oxidative stress. PON2 has arylesterase and arylalkylphosphatase activity (EC 3.1.1.2 and EC 3.1.8.1) and can hydrolyze a number of organophosphate substrates and aromatic carboxylic acid esters. PON2 is membrane-bound and has several potential glycosylation sites. Sequence polymorphisms in this gene may be associated with coronary heart disease and a number of phenotypes related to diabetes. PON2 is not associated with HDL but can prevent LDL lipid peroxidation and reverse the oxidation of mildly oxidized LDL. Alternatively spliced transcript variants encoding different isoforms have been described.