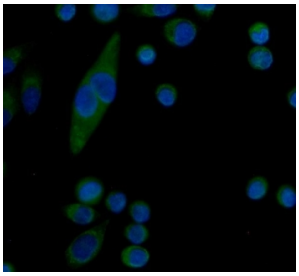
Serum Amyloid P Component Antibody / PTX2 Antibody (RQ4226)

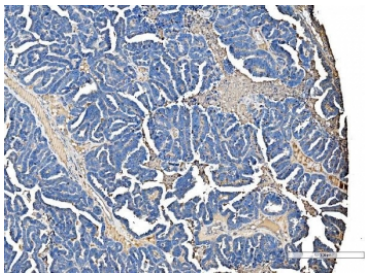
Catalog No.	Formulation	Size
RQ4226	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

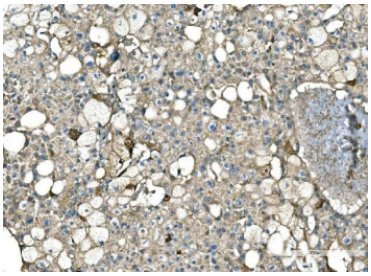
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P02743
Localization	Secreted
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This Serum Amyloid P Component Antibody / PTX2 Antibody is available for research use only.



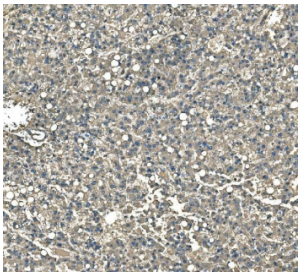
Serum Amyloid P Component Antibody Staining of SiHa Cervical Cancer Cells IF. Immunofluorescence staining of FFPE human SiHa cervical cancer cells with Serum Amyloid P Component Antibody shows green PTX2/APCS signal predominantly within the cytoplasm, with blue DAPI nuclear counterstaining. HIER was performed by steaming sections in pH 6 citrate buffer for 20 min before antibody testing.



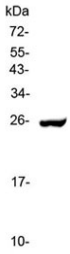
Serum Amyloid P Component Antibody Staining of Human Ovarian Serous Adenocarcinoma IHC. Immunohistochemistry testing of FFPE human ovarian serous adenocarcinoma with Serum Amyloid P Component Antibody shows heterogeneous brown immunoreactivity within the tumor tissue against a blue hematoxylin-counterstained background. HIER was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before antibody testing.



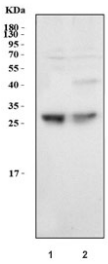
Serum Amyloid P Component Antibody Staining of Human Liver Cancer IHC. Immunohistochemistry testing of FFPE human liver cancer with Serum Amyloid P Component Antibody shows brown PTX2/APCS immunoreactivity distributed throughout the tissue, including prominent cytoplasmic staining in tumor cells. HIER was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before antibody testing.



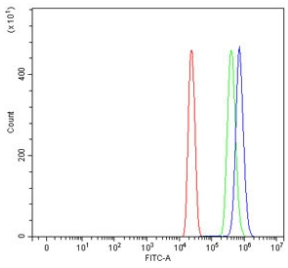
PTX2 Antibody Staining of Human Liver Cancer IHC. Immunohistochemistry testing of FFPE human liver cancer with PTX2 Antibody shows widespread brown staining within the tumor tissue, with predominantly cytoplasmic immunoreactivity and blue hematoxylin-counterstained nuclei. HIER was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before antibody testing.



Serum Amyloid P Component Antibody Detection in Human Placenta WB. Western blot testing of human placenta lysate with Serum Amyloid P Component Antibody at 0.5 ug/ml shows a strong, discrete band at approximately 25 kDa, consistent with the predicted molecular weight of the APCS monomer.



PTX2 Antibody Detection in Human Liver Cancer Cells WB. Western blot testing of human HCCT (lane 1) and HCCP (lane 2) cell lysates with PTX2 Antibody at 0.5 ug/ml shows prominent bands at approximately 25-30 kDa in both samples, consistent with the expected size of serum amyloid P component.



Serum Amyloid P Component Antibody Detection in HL-60 Acute Myeloid Leukemia Cells FACS. Flow cytometry testing of human HL-60 acute myeloid leukemia cells with Serum Amyloid P Component Antibody at 1 ug/million cells following goat serum blocking. The antibody-stained population (blue) shows a clear rightward fluorescence shift relative to the isotype control (green) and cells-alone control (red), demonstrating detection of PTX2/APCS in HL-60 cells.

Description

Serum Amyloid P Component Antibody / PTX2 Antibody recognizes serum amyloid P component (SAP), a secreted glycoprotein encoded by the APCS gene and also known as PTX2. SAP belongs to the pentraxin family of calcium-dependent ligand-binding proteins and circulates as a stable oligomer composed of identical subunits. It participates in interactions with extracellular proteins, chromatin components and cellular material generated during tissue damage.

Serum amyloid P component is closely associated with pathological amyloid deposits. SAP binds proteins arranged in the characteristic amyloid cross-beta structure and is found in essentially all types of amyloid deposits. Its resistance to proteolysis and ability to stabilize amyloid fibrils have made it an important target in studies of amyloid persistence, clearance and disease mechanisms. Despite the similarity in terminology, serum amyloid P component is distinct from the serum amyloid A family of proteins.

PTX2 also has functions extending beyond amyloid biology. The protein can bind DNA, histones and chromatin and has been implicated in the handling of nuclear material released from damaged cells. SAP can recognize apoptotic cells and may participate in their clearance, connecting pentraxin biology with innate immune homeostasis. These properties make PTX2 Antibody research relevant to studies of extracellular protein deposition, cellular damage and inflammatory processes.

The APCS protein is synthesized primarily by the liver and secreted into the circulation. Individual subunits have a molecular weight of approximately 25 kDa and assemble into the characteristic pentraxin structure. Calcium-dependent interactions contribute to SAP binding to amyloid fibrils and several other biological ligands.

NSJ Bioreagents offers this rabbit polyclonal antibody for research into serum amyloid P component expression and PTX2 biology. For our primary APCS resource and a Protein Microarray Validated monoclonal reagent, see our Serum Amyloid P Antibody APCS/3240 / APCS Antibody page. A Serum Amyloid P Component Antibody provides a research tool for investigating PTX2, pentraxin function and amyloid-associated processes.

Application Notes

Titration of the Serum Amyloid P Component Antibody / PTX2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A recombinant human protein corresponding to amino acids H20-L220 was used as the immunogen for the Serum Amyloid P Component Antibody.

Storage

The lyophilized Serum Amyloid P Component Antibody can be stored at 4oC to -20oC. After reconstitution, aliquot and store at -20oC. Avoid repeated freeze/thaws.

Alternate Names

PTX2 antibody, APCS antibody, Serum amyloid P component antibody, SAP antibody, Pentraxin 2 antibody, Amyloid P component antibody

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