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20-1006: Polyclonal antibody to ASC2 (ASC-2/POP)

Clonality :	Polyclonal
Application :	IP,IHC,WB
Reactivity :	Rat,Mouse,Human
Gene :	PYDC1
Gene ID :	260434
Uniprot ID :	Q8WXC3
Format :	Sera
Alternative Name :	PYDC1,ASC2,ASCI,POP1,PYC1
Isotype :	Rabbit IgG
Immunogen Information :	A full-length recombinant protein of ASC2 (ASC-2/POP) was used as the immunogen for this antibody

Description

ASC2/POP1 is a PAAD domain only protein originally identified in a bioinformatics screen aimed at understanding molecular apoptosis mechanisms .Human ASC2/POP1 is an 89 amino acid protein and migrates at ~10-12 kDa on SDS-PAGE gels. ASC2/POP1 has high amino acid sequence homology with ASC (64%), hence it was originally termed ASC2. The PAAD (also known as PYRIN) domain is a conserved sequence motif identified in more than 35 human proteins with putative functions in apoptosis and inflammatory signaling pathways. PAAD was named after the protein families from which it was discovered: pyrin, AIM (absent-in-melanoma), ASC [apoptosis-associated speck-like protein containing a caspase recruitment domain (CARD], and death-domain (DD)-like. In humans, the gene encoding ASC2/POP1 is on chromosome 16p12.1, only 14 kbp away from the ASC locus. The close proximity of ASC2/POP1 to ASC as well as the high sequence homology between them suggest that the ASC2/POP1 and ASC genes arose by gene duplication. Studies have shown that ASC2/POP1 associates with ASC via PADD-PADD interactions and modulates ASC-mediated roles in apoptosis and inflammation. ASC2/POP1 may also have a role in modulating other multidomain PAAD-containing proteins. However, the physiological relevance of ASC2/POP1 remains to be fully elucidated.

Product Info

Amount :	50 µl
Content :	50 µl sera
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

WB: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

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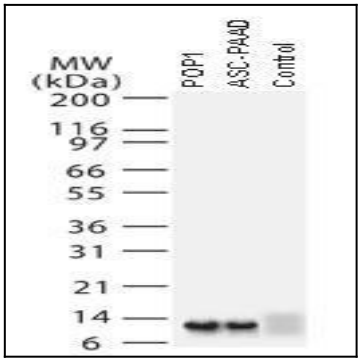

Fig:1 Western blot analysis of ASC2/POP1 using 20-1006 at 1:2000. HEK-293 cells were transiently transfected with plasmids encoding ASC2, POP1 or a negative control plasmid. ASC2 and POP1 were detected at the expected 12 kDa molecular weight.

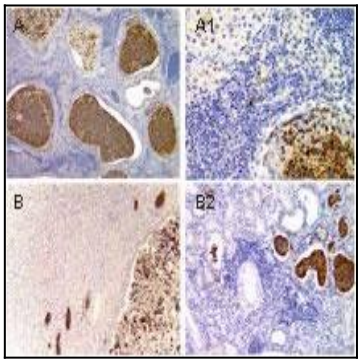

Fig:2 Immunhistochemical analysis of ASC2/POP1 expression in mouse using 20-1006 at 1:2000. A, prostate tissue from a male mouse prostatitis. B, kidney from a mouse with pyelonephritis. A1 and B1, high magnification of A and B, respectively. ASC2/POP1 staining is seen in the granulocytes.

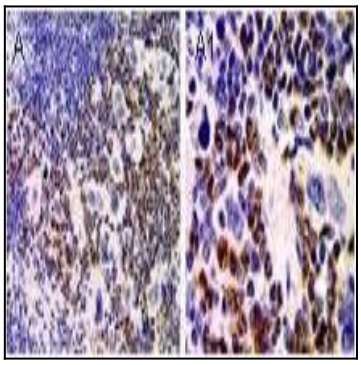

Fig:3 Immunhistochemical analysis of ASC2/POP1 expression in mouse spleen using 20-1006 at 1:2000. A and A1, spleen at low and high magnification, respectively. ASC2/POP1 staining is seen in the granulocytes, whereas the lymph and megakaryocytes are negative.