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Pannexin-2 Antibody
Pannexin 2 Antibody, Clone S121A-31
Catalog # ASM10254

Specification

Pannexin-2 Antibody - Product Information

Application	**WB**
Primary Accession	P60571
Other Accession	NP_955441.2
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Rat**
Clonality	**Monoclonal**
Format	**RPE**

Description
Mouse Anti-Rat Pannexin-2 Monoclonal IgG1

Target/Specificity
Detects ~70kDa. Does not cross-react with Pannexin-1 or Pannexin-3.

Other Names
Pannexin 2 Antibody, PANX2 Antibody, PX2 Antibody, hPANX2 Antibody, MGC119432 Antibody

Immunogen
Fusion protein amino acids 11-664 (all but first 10 amino acids, encompassing extracellular and cytoplasmic domains) of rat Pannexin-2

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-420 was sufficient for detection of Pannexin-2 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cell Membrane | Cell Junction | Gap Junction

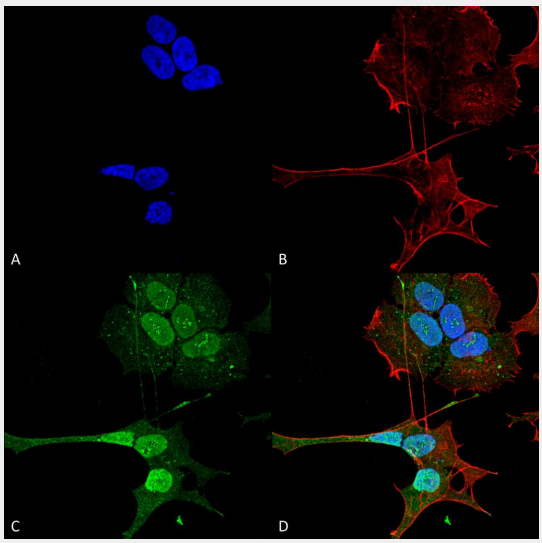
Pannexin-2 Antibody - Protocols

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

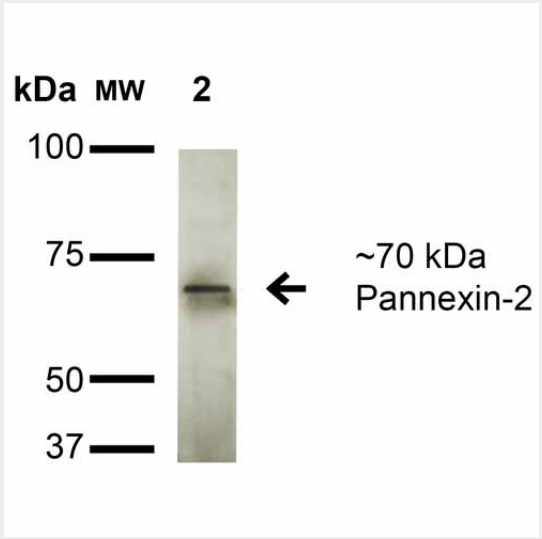
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Pannexin-2 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Pannexin-2 Monoclonal Antibody, Clone S121A-31 (ASM10254). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Pannexin-2 Monoclonal Antibody (ASM10254) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cell Membrane, Cytoplasm, Nucleus. Magnification: 60X.



Western Blot analysis of Rat Brain Membrane showing detection of ~70 kDa Pannexin 2 protein using Mouse Anti-Pannexin 2 Monoclonal Antibody, Clone S121A-31 (ASM10254). Lane 1: Molecular Weight (MW) Ladder. Lane 2: Rat Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Pannexin 2 Monoclonal Antibody (ASM10254) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour

RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~70 kDa.

Pannexin-2 Antibody - Background

Gap junctions are formed by a hexameric group of proteins called connexions for the transport of low molecular weight proteins from cell to cell. Connexins, which are present in all metazoan organisms, serve diverse functions ranging from control of cell growth and differentiation to electric conduction in excitable tissues. Several mammalian cells with malignant phenotypes exhibit decreased connexin expression and gap junction communication. The pannexin gene family encodes a second class of putative gap junction proteins. Pannexins are highly conserved in invertebrates and mammals, indicating the importance of their gap junctional coupling function. Mammalian Pannexin-1 and Pannexin-3 are closely related, while Pannexin-2 is more distantly related. Pannexin-2 is a transmembrane protein expressed in the central nervous system that is unable to assemble in homomeric channels but forms heteromeric channels with Pannexin-1.

Pannexin-2 Antibody - References

1. Bruzzone R., et al. (2003) Proc. Natl. Acad. Sci. USA 100: 13644-13649.
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3. Baranova A., et al. (2004) Genomics 83: 706-716.
4. Vogt A., et al. (2005) Brain Res. Mol. Brain Res. 141: 113-120.
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7. Söhl G., et al. (2005) Nature reviews. Neuroscience 6: 191-200.
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