

NPAS4 Antibody

NPAS4 Antibody, Clone S408-79 Catalog # ASM10327

Specification

NPAS4 Antibody - Product Information

Application WB
Primary Accession O8CJH6
Other Accession NP_705890.1
Host Mouse
Isotype IgG1
Reactivity Mouse, Rat
Clonality Monoclonal

Clonality **Description**

Mouse Anti-Rat NPAS4 Monoclonal IgG1

Target/Specificity
Detects ~90kDa.

Other Names

Neuronal PAS domain-containing protein 4 Antibody, Neuronal PAS4 Antibody, Class E basic helix-loop-helix protein 79 Antibody, HLH-PAS transcription factor NXF Antibody, PAS domain-containing protein 10 Antibody, Limbic-enhanced PAS protein Antibody, bHLHe79 Antibody, PASD10 Antibody and LE-PAS Antibody

Immunogen

Fusion protein amino acids 597-802 (C-terminus) of rat Npas4.

PurificationProtein G Purified

Storage -20°C

Storage Buffer

PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature Blue Ice or 4°C

Certificate of Analysis

A 1:100 dilution of SMC-495 was sufficient for detection of NPAS4 in 20 μ g of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Nucleus

NPAS4 Antibody - Protocols

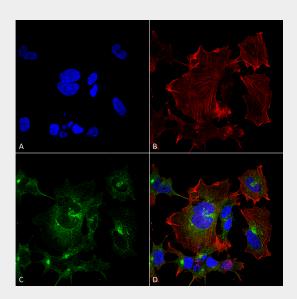
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

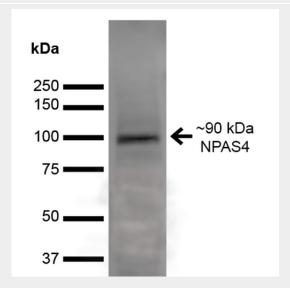


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

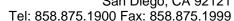
NPAS4 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NPAS4 Monoclonal Antibody, Clone N408/79 (ASM10327). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-NPAS4 Monoclonal Antibody (ASM10327) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) NPAS4 Antibody (D) Composite.



Western Blot analysis of Rat Brain showing detection of ~ 90 kDa NPAS4 protein using Mouse Anti-NPAS4 Monoclonal Antibody, Clone N408/79 (ASM10327). Lane 1: MW Ladder. Lane 2: Rat Brain. Load: 20 μ g. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-NPAS4 Monoclonal Antibody (ASM10327) at 1:1000 for 16 hours at 4°C. Secondary Antibody:





Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~90 kDa. Other Band(s): ~60, 45, 40, 38, 25, 20 kDa.

NPAS4 Antibody - Background

NPAS4 belongs to the Per-Arnt-Sim family of neuronal specific transciption factors, all involved in the development and maintenance of learning and memory pathways (1). NPAS4 is a transcription factor that regulates the formation and maintenance of inhibitory synapses, and can activate the CNS midline enhancer element and the expression of the drebrin gene. Deregulation has been to be associated with developmental disorders such as schizophrenia and autism (2).

NPAS4 Antibody - References

- 1. Zhaohui Z., et al. (2014) Exp Ther Med. 7(4): 1045-1049.
- 2. Coutellier L., et al. (2012) Plos One. 7(9): e46604.