

## Product datasheet for **TA306417**

### NPAS3 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 0.5 - 2 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	NPAS3 antibody was raised against a 28 amino acid peptide from near the amino terminus of human NPAS3.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	neuronal PAS domain protein 3
Database Link:	<a href="#">NP_001158221</a> <a href="#">Entrez Gene 27386 Mouse</a> <a href="#">Entrez Gene 299016 Rat</a> <a href="#">Entrez Gene 64067 Human</a> <a href="#">Q8IXF0</a>



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**Background:**

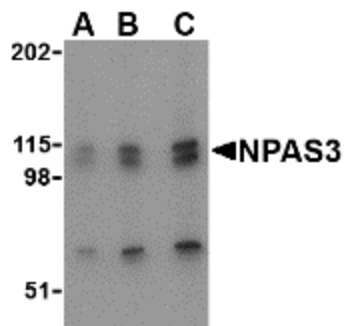
Neuronal PAS domain protein 3 (NPAS3) is a brain-enriched basic helix-loop-helix PAS domain transcription factor and is broadly expressed in the developing neuroepithelium and has recently found to be disrupted by genetic translocation in a family affected with schizophrenia. It was recently shown to be involved in the regulation of FGF signaling in the dentate gyrus by controlling the expression of the FGF receptor subtype 1 and in turn neurogenesis emanating from this region. NPAS3-null mice were growth-retarded and displayed brain defects that included reduced size of the anterior hippocampus, hypoplasia of the corpus callosum, and enlargement of the ventricles, as well as several behavioral abnormalities. Furthermore, these NPAS3-null mice also exhibited disruptions in several neurosignaling pathways involving glutamate, dopamine, and serotonin. These results demonstrate the essential role played by NPAS3 during structural and functional brain development. At least three isoforms of NPAS3 are known to exist.

**Synonyms:**

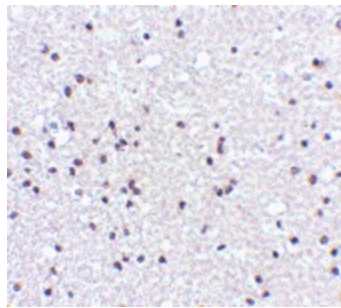
bHLHe12; MOP6; PASD6

**Protein Families:**

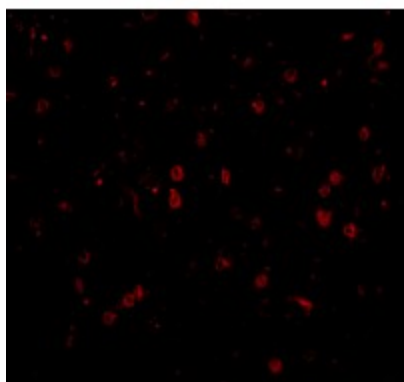
Druggable Genome

**Product images:**

Western blot analysis of NPAS3 in SK-N-SH cell lysate with NPAS3 antibody at (A) 0.5, (B) 1 and (C) 2 ug/ml.



Immunohistochemistry of NPAS3 in human brain tissue with NPAS3 antibody at 5 ug/ml.



Immunofluorescence of NPAS3 in human brain tissue with NPAS3 antibody at 20 µg/mL.