

Rabbit Anti-NPAS3 antibody

SL11905R

Product Name NPAS3

Chinese Name 神经细胞 PAS 结构域蛋白 3 抗体

Alias Basic helix loop helix PAS protein MOP6; Basic-helix-loop-helix-PAS protein MOP6; bHLHe12; Class E basic helix-loop-helix protein 12; FLJ10003; FLJ11138; FLJ11605; Member of PAS protein 6; MOP 6; MOP6; Neuronal PAS domain containing protein 3; Neuronal PAS domain protein 3; Neuronal PAS domain-containing protein 3; Neuronal PAS3; NPAS 3; NPAS3; NPAS3_HUMAN; PAS domain-containing protein 6; PASD 6; PASD6.

Research Area Neurobiology Signal transduction transcriptional regulatory factor Epigenetics

Immunogen Species Rabbit

Clonality Polyclonal

React Species (predicted: Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Sheep,)
IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Applications (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 101kDa

Cellular localization The nucleus

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human NPAS3: 21-120/933

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or

diagnostic applications.

PubMed

[PubMed](#)

The Per-Arnt-Sim (PAS) domain is a 270 amino acid motif that mediates associations among various PAS family transcription factors. The PAS family contains neuronal specific transcription factors known as NPAS1, NPAS2 and NPAS3, which are involved the development and maintenance of learning and memory pathways. NPAS1 regulates erythropoietin expression in developing brain. NPAS2, also designated PAS 4/MOP4, associates with MOP3 to activate transcription. NPAS3, which localizes to the nucleus and is ubiquitously expressed in the adult brain, may be involved in neurogenesis and may control regulatory pathways relevant to psychotic illness and to schizophrenia. It regulates tracheal cell fates in the embryo and is necessary for the development of the posterior spiracles and the salivary gland duct. NPAS3 contains 1 basic helix-loop-helix (bHLH) domain, 1 PAC (PAS-associated C-terminal) domain, and 2 PAS (PER-ARNT-SIM) domains. Efficient DNA binding by NPAS2 requires dimerization with another bHLH protein.

Function:

May play a broad role in neurogenesis. May control regulatory pathways relevant to schizophrenia and to psychotic illness.

Subunit:

Efficient DNA binding requires dimerization with another bHLH protein.

**Product
Detail**

Subcellular Location:

Nucleus.

Tissue Specificity:

Ubiquitously expressed in the adult brain.

DISEASE:

Note=A chromosomal aberration involving NPAS3 is found in a family with schizophrenia. Translocation t(9;14)(q34;q13).

Similarity:

Contains 1 basic helix-loop-helix (bHLH) domain.
Contains 1 PAC (PAS-associated C-terminal) domain.
Contains 2 PAS (PER-ARNT-SIM) domains.

SWISS:

Q8IXF0

Gene ID:

64067

Database links:

[Entrez Gene: 527053](#) Cow

[Entrez Gene: 100688457](#) Dog

[Entrez Gene: 102191653](#) Goat

[Entrez Gene: 100713384](#) Guinea pig

[Entrez Gene: 100050414](#) Horse

[Entrez Gene: 64067](#) Human

[Entrez Gene: 27386](#) Mouse

[Entrez Gene: 100739785](#) Pig

[Entrez Gene: 299016](#) Rat

[Entrez Gene: 570491](#) Zebrafish

[SwissProt: Q8IXF0](#) Human

[SwissProt: Q9QZQ0](#) Mouse