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Rabbit Anti-NPAS3/Cy5 Conjugated antibody

SL11905R-Cy5

Product Name	Anti-NPAS3/Cy5
Chinese Name	Cy5 标记的神经细胞 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)
Applications	ICC/IF=1:50-200,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	101kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human NPAS3
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** 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.

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.

Database links:
UniProtKB/Swiss-Prot: Q8IXF0.1

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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