



NPAS2 Monoclonal Antibody

Catalog No	YP-mAb-02217
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	NPAS2
Protein Name	Neuronal PAS domain-containing protein 2
Immunogen	Synthesized peptide derived from NPAS2 . at AA range: 340-420
Specificity	NPAS2 Monoclonal Antibody detects endogenous levels of NPAS2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NPAS2; BHLHE9; MOP4; PASD4; Neuronal PAS domain-containing protein 2; Neuronal PAS2; Basic-helix-loop-helix-PAS protein MOP4; Class E basic helix-loop-helix protein 9; bHLHe9; Member of PAS protein 4; PAS domain-containing protein 4
Observed Band	91kD
Cell Pathway	Nucleus .
Tissue Specificity	Human lung,Lung,
Function	function:BMAL1-NPAS2 heterodimers activate E-box element (3'-CACGTG-5') transcription of a number of proteins of the circadian clock. This transcription is inhibited in a feedback loop by PER, and also by CRY proteins.,polymorphism:Variants in NPAS2 show a susceptibility to seasonal affective disorder (SAD) [MIM:608516]. SAD is a depressive condition resulting from seasonal changes, and with diurnal preference.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,similarity:Contains 1 PAC (PAS-associated C-terminal) domain.,similarity:Contains 2 PAS (PER-ARNT-SIM) domains.,subunit:Component of the circadian clock oscillator which includes the CRY proteins, CLOCK or NPAS2, BMAL1 or BMAL2, CSNK1D and/or CSNK1E, TIMELESS and the PER proteins. Efficient DNA binding requires dimerization with another bHLH protein. Heterodimerization with CLOCK or NPAS2 is required



for E-box-dependent t

Background

The protein encoded by this gene is a member of the basic helix-loop-helix (bHLH)-PAS family of transcription factors. A similar mouse protein may play a regulatory role in the acquisition of specific types of memory. It also may function as a part of a molecular clock operative in the mammalian forebrain. [provided by RefSeq, Jul 2008],

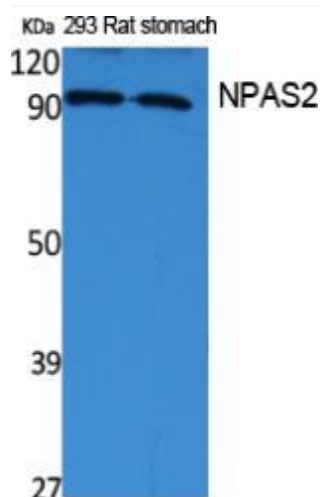
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of extracts from rat stomach, 293 cells, using NPAS2 Monoclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).