

Immunotag™ NPAS2 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT5045
Product Description	Immunotag™ NPAS2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NPAS2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from NPAS2 . at AA range: 340-420
Specificity	NPAS2 Polyclonal Antibody detects endogenous levels of NPAS2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	NPAS2
Accession No.	Q99743 P97460
Alternate Names	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

Antibody Specification

Description	neuronal PAS domain protein 2(NPAS2) Homo sapiens 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],
Cell Pathway/ Category	Circadian rhythm,
Protein Expression	Human lung,Lung,
Subcellular Localization	nucleus,nucleoplasm,transcription factor complex,cytoplasm,cytosol,
Protein 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 transactivation.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.