

PROK2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58312

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9HC23
Reactivity	Rat, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14314
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PROK2/Prokineticin 2
Epitope Specificity	28-100/129
Isotype	IgG
Purity	affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted.

SIMILARITY Belongs to the AVIT (prokineticin) family.

DISEASE Hypogonadotropic hypogonadism 4 with or without anosmia (HH4) [MIM:610628]: A disorder characterized by absent or incomplete sexual maturation by the age of 18 years, in conjunction with low levels of circulating gonadotropins and testosterone and no other abnormalities of the hypothalamic-pituitary axis. In some cases, it is associated with non-reproductive phenotypes, such as anosmia, cleft palate, and sensorineural hearing loss. Anosmia or hyposmia is related to the absence or hypoplasia of the olfactory bulbs and tracts. Hypogonadism is due to deficiency in gonadotropin-releasing hormone and probably results from a failure of embryonic migration of gonadotropin-releasing hormone-synthesizing neurons. In the presence of anosmia, idiopathic hypogonadotropic hypogonadism is referred to as Kallmann syndrome, whereas in the presence of a normal sense of smell, it has been termed normosmic idiopathic hypogonadotropic hypogonadism (nIHH). Note=The disease is caused by mutations affecting the gene represented in this entry.

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

Background Descriptions Prokineticin 2 is known to regulate many different biological functions, including neurogenesis, smooth muscle contractility, angiogenesis and circadian rhythm. In serving the latter role, prokineticin 2 functions as an output molecule from the suprachiasmatic nucleus (SCN) of the hypothalamus, that transmits behavioral rhythms, but may also function locally within the SCN to synchronize output. Prokineticin 2 expression is induced by CLOCK and BMAL1 heterodimers and light, and is inhibited by period genes (PER1, PER2 and PER3) and cryptochrome genes (CRY1 and CRY2). Expression is reported in the SCN and among a few other discrete brain areas, including the islands of Calleja, media I preoptic area of the hypothalamus and the shell of the nucleus accumbens as well as in the testis, prostate and, at lower levels, in the small intestine.

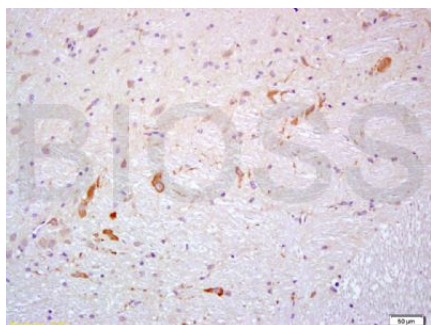
Additional Information

Gene ID	60675
Other Names	Prokineticin-2, PK2, Protein Bv8 homolog, PROK2, BV8
Target/Specificity	Expressed in the testis and, at low levels, in the small intestine.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PROK2
Synonyms	BV8
Function	May function as an output molecule from the suprachiasmatic nucleus (SCN) that transmits behavioral circadian rhythm. May also function locally within the SCN to synchronize output. Potently contracts gastrointestinal (GI) smooth muscle.
Cellular Location	Secreted.
Tissue Location	Expressed in the testis and, at low levels, in the small intestine

Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-PROK2/Prokineticin 2 Polyclonal Antibody, Unconjugated(AP58312) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.