

**PROK2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58312****Specification****PROK2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">O9HC23</a>
Reactivity	Rat, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PROK2/Prokineticin 2
Epitope Specificity	28-100/129
Isotype	IgG
<b>Purity</b>	
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

**Important Note**

caused by mutations affecting the gene represented in this entry.

**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.

**PROK2 Polyclonal Antibody - 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**

<span class="dilution\_WB">WB~~1:1000</span><br \><span class="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class="dilution\_IF">IF~~1:50~200</span><br \><span class="dilution\_E">E~~N/A</span>

**Format**

0.01M TBS(pH7.4), 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.

**PROK2 Polyclonal Antibody - 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.

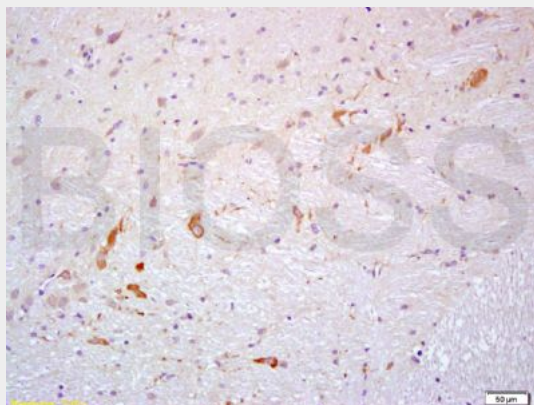
**Tissue Location**

Expressed in the testis and, at low levels, in the small intestine

**PROK2 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PROK2 Polyclonal Antibody - 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(bs-5784R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining