

**PMCH Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5528c**

**Specification**

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**PMCH Antibody (Center) - Product Information**

Application	WB, FC, IHC-P,E
Primary Accession	<a href="#">P20382</a>
Other Accession	<a href="#">NP_002665.2</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	18679
Antigen Region	94-122

**PMCH Antibody (Center) - Additional Information**

**Gene ID** 5367

**Other Names**

Pro-MCH, Neuropeptide-glycine-glutamic acid, NGE, Neuropeptide G-E, Neuropeptide-glutamic acid-isoleucine, NEI, Neuropeptide E-I, Melanin-concentrating hormone, MCH, PMCH, MCH

**Target/Specificity**

This PMCH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 94-122 amino acids from the Central region of human PMCH.

**Dilution**

WB~~1:1000  
FC~~1:10~50  
IHC-P~~1:50~100  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PMCH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PMCH Antibody (Center) - Protein Information**

**Name** PMCH

**Synonyms** MCH

**Function** MCH may act as a neurotransmitter or neuromodulator in a broad array of neuronal functions directed toward the regulation of goal-directed behavior, such as food intake, and general arousal. May also have a role in spermatocyte differentiation.

**Cellular Location**

Secreted.

**Tissue Location**

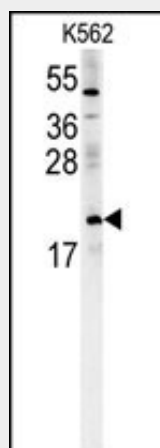
Predominantly expressed in lateral hypothalamus, also detected in pallidum, neocortex and cerebellum. Also found in thymus, brown adipose tissue, duodenum and testis (spermatogonia, early spermatocytes and Sertoli cells). No expression in peripheral blood. In brain exclusively mature MCH and NEI peptides are present. In peripheral tissues a large product, encompassing the NEI and MCH domains of the precursor, is found predominantly

### PMCH Antibody (Center) - Protocols

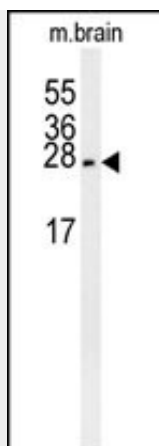
Provided below are standard protocols that you may find useful for product applications.

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

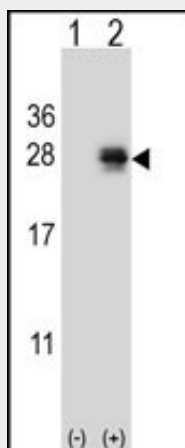
### PMCH Antibody (Center) - Images



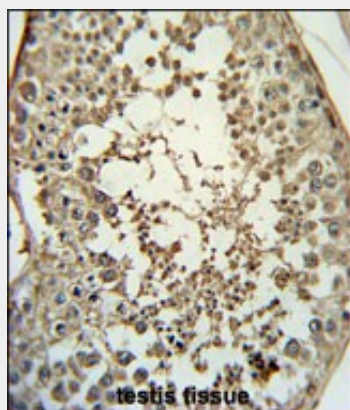
PMCH Antibody (Center) (Cat. #AP5528c) western blot analysis in K562 cell line lysates (15ug/lane). This demonstrates the PMCH antibody detected the PMCH protein (arrow).



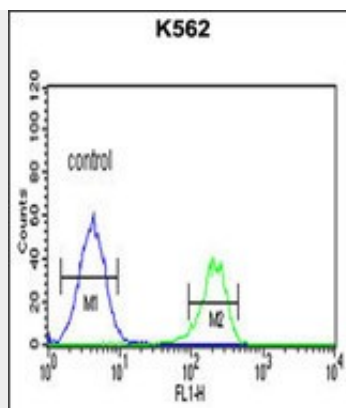
PMCH Antibody (Center) (Cat. #AP5528c) western blot analysis in mouse brain tissue lysates (15ug/lane). This demonstrates the PMCH antibody detected the PMCH protein (arrow).



Western blot analysis of PMCH (arrow) using rabbit polyclonal PMCH Antibody (Center) (Cat. #AP5528c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PMCH gene.



PMCH Antibody (Center) (Cat. #AP5528c) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PMCH Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



PMCH Antibody (Center) (Cat. #AP5528c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **PMCH Antibody (Center) - Background**

The melanin-concentrating hormone (MCH) is a cyclic neuropeptide isolated initially from salmon pituitary gland and later from rat hypothalamus (summarized by Nahon et al., 1992 [PubMed 1572663]). In mammals, MCH perikarya are confined largely to the lateral hypothalamus and zona incerta area with extensive neuronal projections throughout the brain, including the neurohypophysis. The anatomic distribution suggests a neurotransmitter or neuromodulator role for MCH in a broad array of neuronal functions directed toward the regulation of goal-directed behavior, such as food intake, and general arousal. MCH and 2 other putative neuropeptides, NEI and NGE, are encoded by the same precursor and appear colocalized in nerve cells and in many instances within the projections. The precursor is designated pro-melanin-concentrating hormone (PMCH).

### **PMCH Antibody (Center) - References**

Kim, J.J., et al. J. Hum. Genet. 55(1):27-31(2010)  
Gratacos, M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009) :  
Aziz, A., et al. Brain Pathol. 18(4):474-483(2008)  
Kokkotou, E., et al. Proc. Natl. Acad. Sci. U.S.A. 105(30):10613-10618(2008)