

# POMC Monoclonal antibody

Catalog Number: 66358-1-Ig 11 Publications

## Basic Information

<b>Catalog Number:</b> 66358-1-Ig	<b>GenBank Accession Number:</b> BC065832	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1494 µg/ml	<b>GeneID (NCBI):</b> 5443	<b>CloneNo.:</b> 3C12C7
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P01189	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:1000-1:4000 IF 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> proopiomelanocortin	
<b>Immunogen Catalog Number:</b> AG17311	<b>Calculated MW:</b> 267 aa, 29 kDa <b>Observed MW:</b> 35 kDa	

## Applications

<b>Tested Applications:</b> FC, IF/ICC, IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF, IHC	<b>WB :</b> pig brain tissue, rat brain tissue, A375 cells, human placenta tissue, PC-12 cells, Transfected HEK-293 cells
<b>Species Specificity:</b> human, rat, mouse, pig	<b>IHC :</b> human pituitary tissue, mouse pancreas tissue
<b>Cited Species:</b> human, rat, mouse, pig	<b>IF :</b> HeLa cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Pro-opiomelanocortin (POMC) is a prohormone that encodes multiple smaller peptide hormones within its structure. POMC plays important roles in many pathological and physiological processes, including regulating energy metabolism, immune reactions, and sexual functions. POMC expression differs quantitatively and qualitatively among most normal tissues. The large molecule of POMC is the source of several important biologically active substances. POMC can be cleaved enzymatically into the following peptides: d NPP,  $\gamma$ -MSH, ACTH,  $\alpha$ -MSH, CLIP, Lipotropin  $\beta$ , Lipotropin  $\gamma$ ,  $\beta$ -MSH,  $\beta$  endorphin and Met-enkephalin.

## Notable Publications

Author	Pubmed ID	Journal	Application
Guangpin Chu	36387867	Front Endocrinol (Lausanne)	WB, IF
Lifang Zhang	34767244	Reprod Sci	IF
Joseph Walters	35537288	Biochem Biophys Res Commun	WB, IF

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

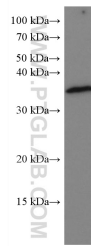
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

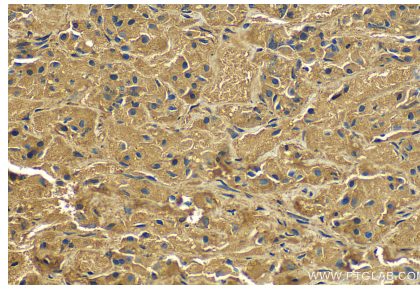
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

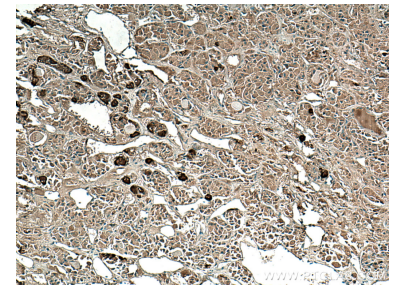
## Selected Validation Data



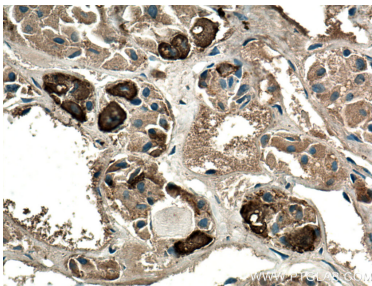
pig brain tissue were subjected to SDS PAGE followed by western blot with 66358-1-Ig (POMC antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



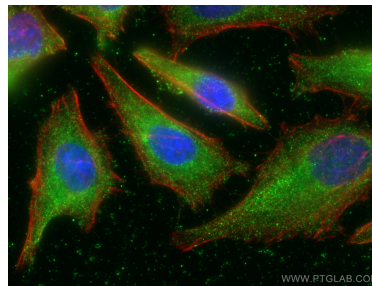
Immunohistochemical analysis of paraffin-embedded human pituitary tissue slide using 66358-1-Ig (POMC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



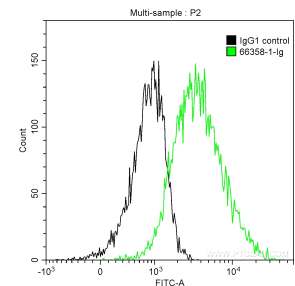
Immunohistochemical analysis of paraffin-embedded human pituitary tissue slide using 66358-1-Ig (POMC antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pituitary tissue slide using 66358-1-Ig (POMC antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using POMC antibody (66358-1-Ig, Clone: 3C12C7) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.2 ug Anti-Human POMC (66358-1-Ig, Clone:3C12C7) and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (black). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100.