

For Research Use Only

# Proenkephalin-A Polyclonal antibody

Catalog Number:32272-1-AP



## Basic Information

<b>Catalog Number:</b> 32272-1-AP	<b>GenBank Accession Number:</b> BC032505	<b>Purification Method:</b> Antigen affinity Purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5179	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:50-1:500 IF/ICC 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P01210	
<b>Isotype:</b> IgG	<b>Full Name:</b> proenkephalin	
<b>Immunogen Catalog Number:</b> AG27972	<b>Calculated MW:</b> 267 aa, 31 kDa	
	<b>Observed MW:</b> 32 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** fetal human brain tissue, mouse brain tissue, human heart tissue, rat brain tissue

**IHC :** mouse brain tissue, rat brain tissue

**IF/ICC :** SH-SY5Y cells,

## Background Information

Proenkephalin-A (PENK) is also named as Synenkephalin, Met-enkephalin and Opioid growth factor (OGF), and belongs to the opioid neuropeptide precursor family. PENK is a neuropeptide that competes with and mimics the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress (PMID:7057924). PENK hypermethylation is also associated with bladder cancer, hepatocellular carcinoma, colorectal cancer, and prostate cancer (PMID:36403035). Proenkephalin (PENK) represents a new candidate to determine kidney function. This peptide is cleaved from the precursor peptide preproenkephalin A alongside enkephalins (endogenous opioids) and is filtrated in the glomerulus (PMID: 33636859).

## 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

\*\*\* 20ul sizes contain 0.1% BSA

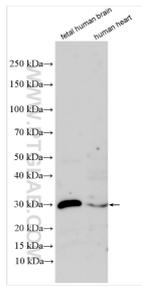
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

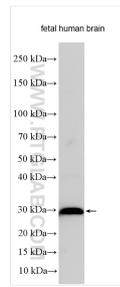
E: proteintech@ptglab.com  
W: ptglab.com

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

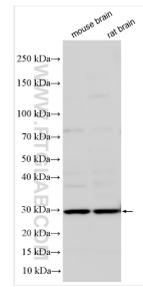
## Selected Validation Data



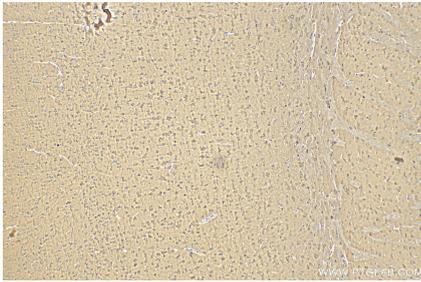
Various lysates were subjected to SDS PAGE followed by western blot with 32272-1-AP (PENK antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



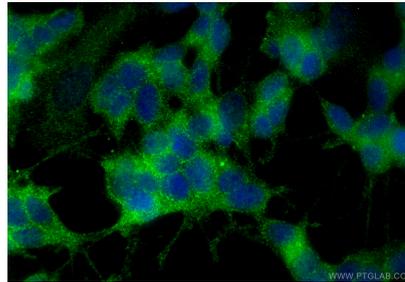
Fetal human brain was subjected to SDS PAGE followed by western blot with 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



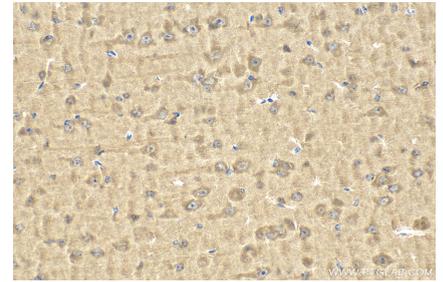
Various lysates were subjected to SDS PAGE followed by western blot with 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



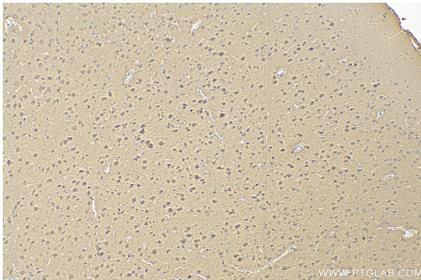
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



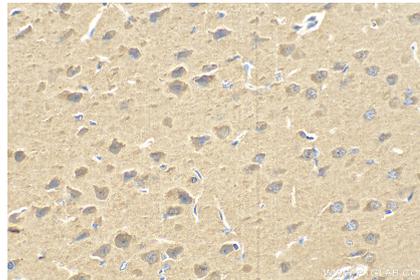
Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using Proenkephalin-A antibody (32272-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).