For Research Use Only

Proenkephalin-A Polyclonal antibody

Catalog Number:32272-1-AP

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
32272-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG27972

GenBank Accession Number:
BC032505

GeneID (NCBI):
5179

UNIPROT ID:
P01210

Full Name:
proenkephalin

Calculated MW:
267 aa, 31 kDa

Observed MW:
32 kDa

Purification Method:
Antigen affinity Purification

Recommended Dilutions:
WB: 1:1000-1:4000
IHC: 1:50-1:500
IF/ICC: 1:200-1:800

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

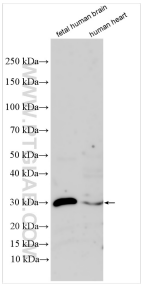
Proenkephalin-A (PENK) is also named as Synenkephalin, Met-enkephalin and Opioid growth factor (OGF), and belongs to the opioid neuropeptide precursor family. PENK is a neuropeptide that competes with and mimics the effects of opiate drugs. They play a role in a number of physiologic functions, including 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

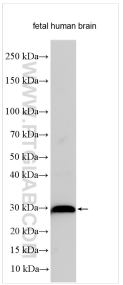
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

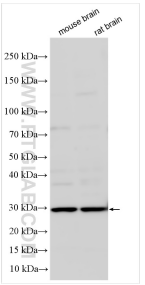
Selected Validation Data



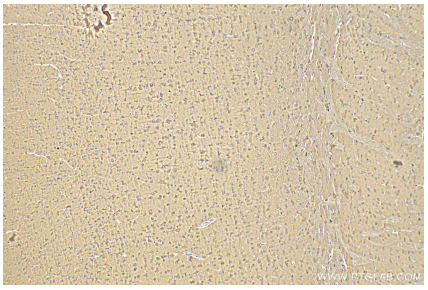
Various lysates were subjected to SDS PAGE followed by western blot with 32272-1-AP (PENK antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



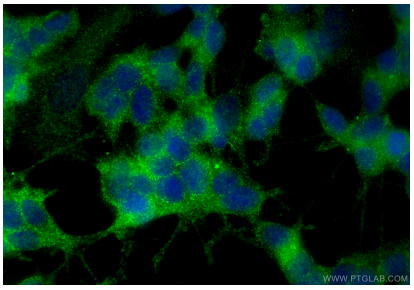
Fetal human brain was subjected to SDS PAGE followed by western blot with 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



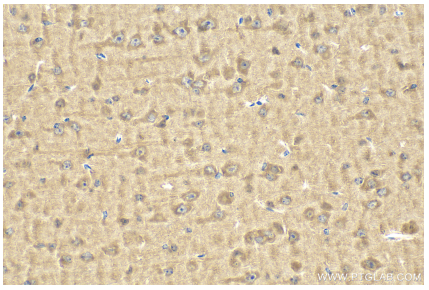
Various lysates were subjected to SDS PAGE followed by western blot with 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



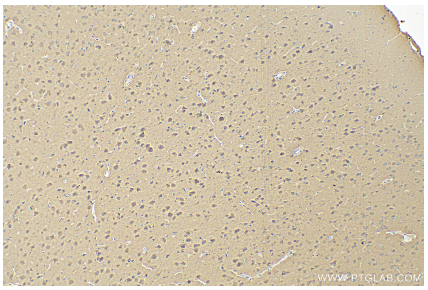
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 32272-1-AP (Proenkephalin-A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



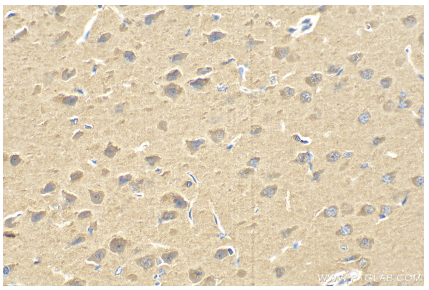
Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using Proenkephalin-A antibody (32272-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



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).