

EN1 (Engrailed 1) Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7278A**Specification**

EN1 (Engrailed 1) Antibody (N-term) - Product Information

Application	IF, IHC-P, WB,E
Primary Accession	Q05925
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

EN1 (Engrailed 1) Antibody (N-term) - Additional Information**Gene ID** 2019**Other Names**

Homeobox protein engrailed-1, Homeobox protein en-1, Hu-En-1, EN1

Target/Specificity

This EN1 (Engrailed 1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human EN1 (Engrailed 1).

Dilution

IF~~1:25

IHC-P~~1:25

WB~~1:2000

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

EN1 (Engrailed 1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EN1 (Engrailed 1) Antibody (N-term) - Protein Information**Name** EN1

Function Required for proper formation of the apical ectodermal ridge and correct dorsal-ventral patterning in the limb.

Cellular Location

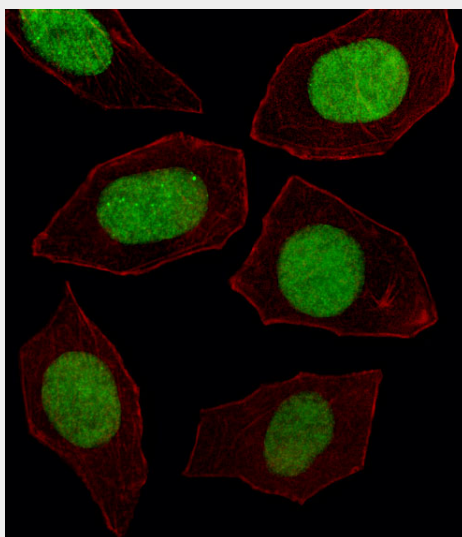
Nucleus.

EN1 (Engrailed 1) Antibody (N-term) - Protocols

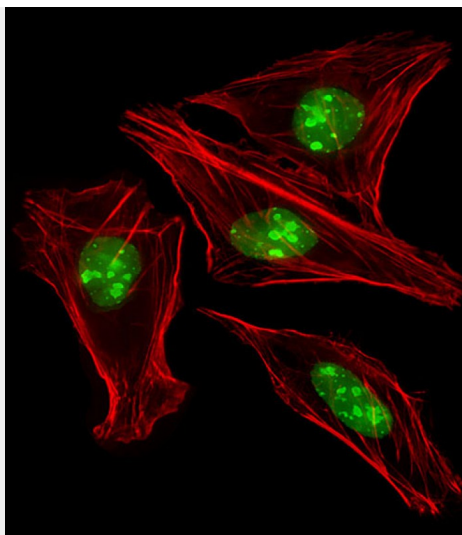
Provided below are standard protocols that you may find useful for product applications.

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

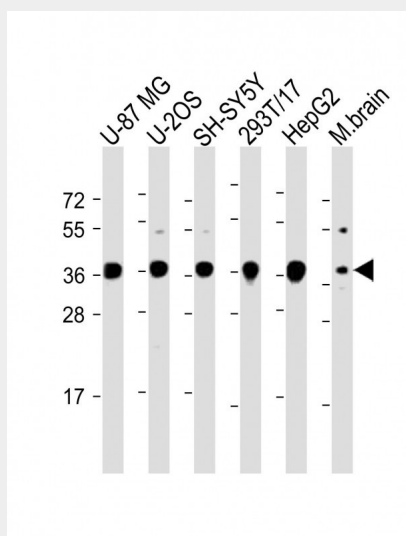
EN1 (Engrailed 1) Antibody (N-term) - Images



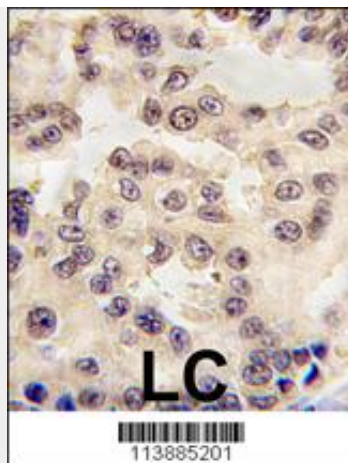
Fluorescent image of U251 cell stained with EN1 Antibody (N-term)(Cat#AP7278a).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with EN1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).EN1 immunoreactivity is localized to Nucleus significantly.



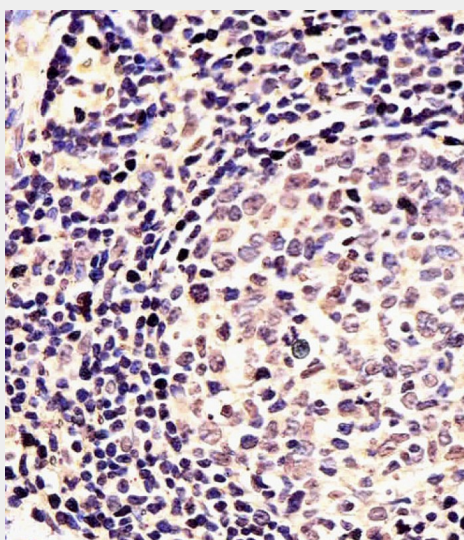
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (Human Sarcoma cell line) cells labeling HME1 with AP7278a at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Immunofluorescence image showing nucleus and nucleoli staining on U-2 OS cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with Phalloidin (OB16636430) at 1/100 dilution (red).



All lanes : Anti-EN1 (Engrailed 1) Antibody (N-term) at 1:2000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lane 4: 293T/17 whole cell lysate Lane 5: HepG2 whole cell lysate Lane 6: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with EN1 antibody (N-term) (Cat.#AP7278a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



AP7278a staining EN1 in Human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

EN1 (Engrailed 1) Antibody (N-term) - Background

Homeobox-containing genes are thought to have a role in controlling development. In *Drosophila*, the 'engrailed' (*en*) gene plays an important role during development in segmentation, where it is required for the formation of posterior compartments. Different mutations in the mouse homologs, *En1* and *En2*, produced different developmental defects that frequently are lethal. The human engrailed homologs 1 and 2 encode homeodomain-containing proteins and have been implicated in the control of pattern formation during development of the central nervous system.

EN1 (Engrailed 1) Antibody (N-term) - References

Bachar-Dahan, L., *Mol. Biol. Cell* 17 (6), 2572-2580 (2006)
Kohler, A., *Genomics* 15 (1), 233-235 (1993)

EN1 (Engrailed 1) Antibody (N-term) - Citations

- [Engrailed 1 overexpression as a potential prognostic marker in quintuple-negative breast cancer.](#)
- [Differential Neuronal Plasticity of Dental Pulp Stem Cells From Exfoliated Deciduous and Permanent Teeth Towards Dopaminergic Neurons.](#)