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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, WB, IHC-P,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
WB~~1:2000
IHC-P~~1:25

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.

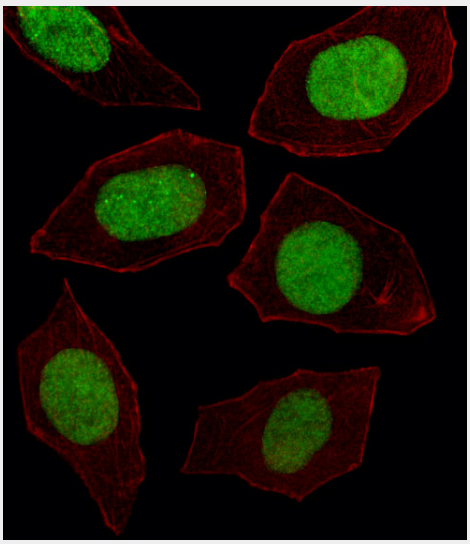
Cellular Location
Nucleus.

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

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

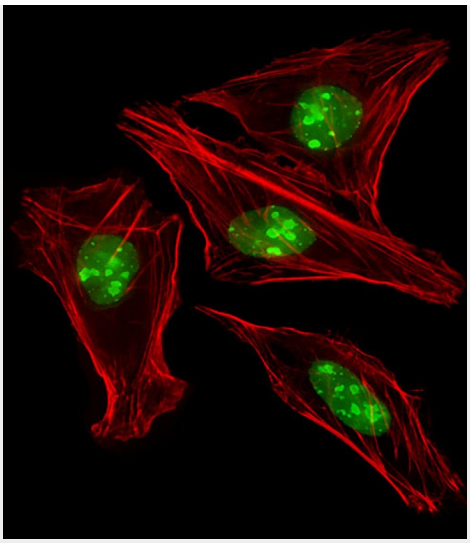
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

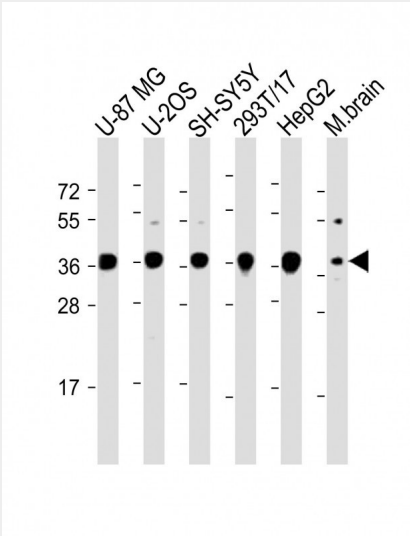


Fluorescent image of U251 cell stained with EN1 Antibody (N-term)(Cat#AP7278a).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with EN1 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit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

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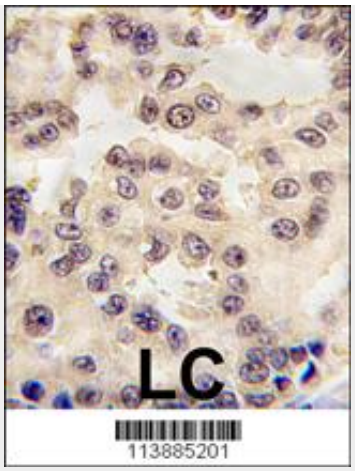


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (Human Sarcoma cell line) cells labeling HME1 with AP7278a at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Immunofluorescence 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).

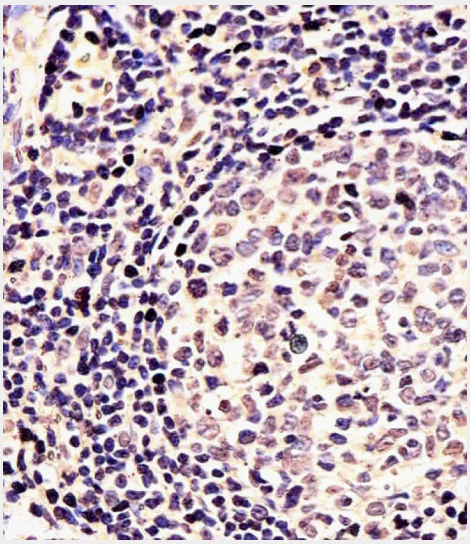


All lanes : Anti-EN1 (Engrailed 1) Antibody (N-term) at 1:2000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lane 4: 293T/17 whole cell lysate Lane 5: HepG2 whole cell lysate Lane 6: Mouse brain lysate Lysates/proteins at 20 µg per lane.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

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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 hours 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.