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EN1 (Engrailed 1) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7278A

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q05925
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13885
Calculated MW	40115
Antigen Region	1-30

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	WB~~1:1000 IHC-P~~1:100~500 IF~~1:25 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.

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.

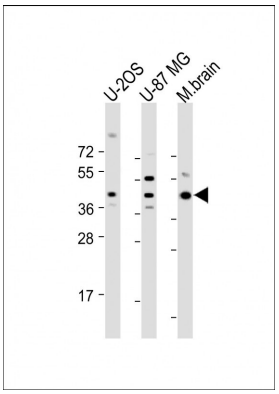
Background

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.

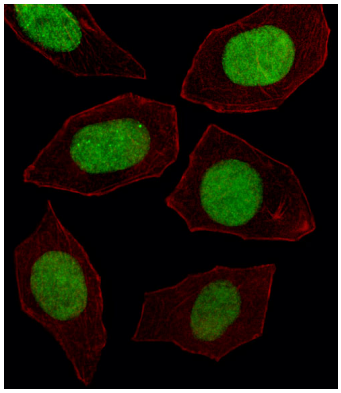
References

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

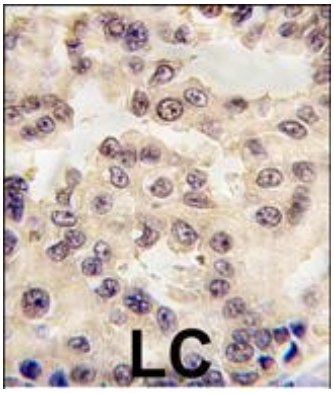
Images



All lanes : Anti-EN1 (Engrailed 1) Antibody (N-term) at 1:2000 dilution Lane 1: U-2OS whole cell lysate Lane 2: U-87 MG whole cell lysate Lane 3: 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.



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.



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.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.