

Product datasheet for **AP11463PU-N**

ERAS (N-term) Rabbit Polyclonal Antibody

Product data:

| | |
|-----------------------|--|
| Product Type: | Primary Antibodies |
| Applications: | IF, IHC, WB |
| Recommended Dilution: | ELISA 1:1,000. Western blot 1:50 - 1:100. Immunofluorescence 1:10 - 1:50. Immunohistochemistry 1:50. |
| Reactivity: | Human |
| Host: | Rabbit |
| Isotype: | Ig |
| Clonality: | Polyclonal |
| Immunogen: | This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of human ERAS. |
| Specificity: | This antibody detects ERAS at N-term. |
| Formulation: | PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid Ig fraction |
| Concentration: | lot specific |
| Purification: | Protein A column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS. |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | ES cell expressed Ras |
| Database Link: | Entrez Gene 3266 Human Q7Z444 |



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Background:

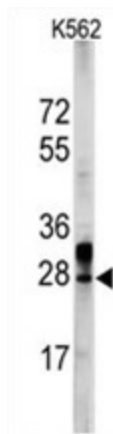
Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. Point mutations of several amino acids of human RAS, including gly12, ala59, or glu63, render the protein constitutively active. Embryonic stem cell-expressed Ras (ERAS) has serine, alanine, and asparagine at the positions corresponding to gly12, ala59, and glu63 of human RAS, suggesting that it is constitutively active. The PI3K (phosphoinositide 3-kinase) pathway is important for proliferation, survival and maintenance of pluripotency in ES cells. The PI3K pathway is activated by growth factors and cytokines including insulin and leukaemia inhibitory factor. In addition to these exogenous factors, the PI3K pathway is endogenously activated by the constitutively active Ras family protein ERas (ES cell-expressed Ras). ERas null ES cells maintained pluripotency but show significantly reduced growth and tumorigenicity, which can be rescued by expression of ERas cDNA or by activated phosphatidylinositol 3-hydroxykinase. The transforming oncogene ERAS appears to be important in the tumor-like growth properties of ES cells.

Synonyms:

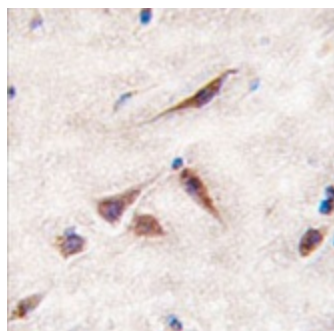
GTPase ERas, E-Ras, HRASP

Note:

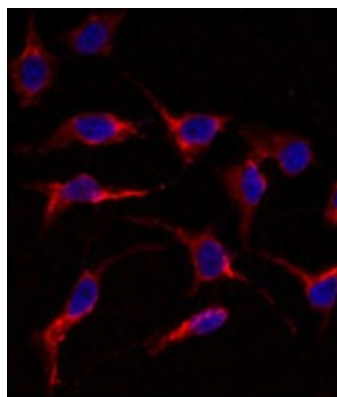
Molecular weight: 25156 Da

Product images:

Western blot analysis of ERAS Antibody (N-term) in K562 cell line lysates (35 ug/lane). ERAS (arrow) was detected using the purified Pab (1:60 dilution).



Formalin-fixed and paraffin-embedded human brain tissue reacted with ERAS antibody (N-term), 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.



Immunofluorescence analysis of anti-ERAS Antibody (N-term) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.