

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606 techsupport@origene.com

#### OriGene Technologies GmbH

Schillerstr. 5 32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info-de@origene.com

# AP05110PU-N Polyclonal Antibody to Farnesyl - Purified

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Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	Protein isoprenylation is a post-translational modification that affects about 0.5% of cellular proteins and is essential for the biological activity of proteins. Two enzymes catalyze the attachment of two prenyl groups to the sulfhydryl group of carboxyl-terminal cysteine groups. Proteins which are prenylated by these enzymes have a distinct motif at the C-terminal of the protein, C-A1-A2-X (C = Cysteine, A 1 & A2 = aliphatic amino acids). The two enzymes involved in this transfer are farnesyltransferase and geranylgeranyltransferase. These transfer a 15 carbon farnesyl or a 20 carbon geranygeranyl, respectively, from a prenyl-pyrophosphate to the protein. Examples of proteins containing this C-A-A-X motif are members of the Ras small G protein family, the nuclear lamins and the gamma subunit of trimeric G proteins. Prenylation of proteins is necessary for membrane association of proteins as well as protein-protein interactions and the nature of the linked isoprenyl group can influence the protein interactions, such as the interaction between G proteins and receptors.
Host / Isotype:	Rabbit / IgG
Immunogen:	Antibody developed using Farnesyl cysteine conjugated to KLH.
Format:	<b>State:</b> Liquid purified Ig fraction. <b>Purification:</b> Ammonium Sulfate Precipitation <b>Buffer System:</b> Phosphate buffered saline with 0.08% Sodium Azide
Applications:	<b>ELISA:</b> Detects farnesyl motif derived from isoprenylated C-A-A-X sequence. Also cross- reacts with geranylgeranyl motif. Detects KLH as well. <b>Immunofluorescence</b> Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes Farnesyl.
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Product Citations:	<b>Originator or purchased from resellers:</b> 1. Clase AC, Lyman MG, del Rio T, Randall JA, Calton CM, Enquist LW, et al. The pseudorabies virus Us2 protein, a virion tegument component, is prenylated in infected cells. J Virol. 2003 Nov;77(22):12285-98. PubMed PMID: 14581565.
General Readings:	<ol> <li>Baron R, Fourcade E, Lajoie-Mazenc I, Allal C, Couderc B, Barbaras R, et al. RhoB prenylation is driven by the three carboxyl-terminal amino acids of the protein: evidenced in vivo by an anti-farnesyl cysteine antibody. Proc Natl Acad Sci U S A. 2000 Oct 10;97(21):11626-31. PubMed PMID: 11027361.</li> <li>Lin HP, Hsu SC, Wu JC, Sheen IJ, Yan BS, Syu WJ. Localization of isoprenylated antigen of hepatitis delta virus by anti-farnesyl antibodies. J Gen Virol. 1999 Jan;80 (</li> </ol>

For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.

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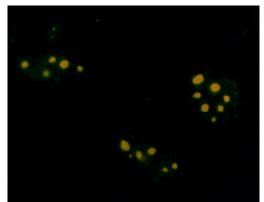
### Pt 1):91-6. PubMed PMID: 9934689.

3. Aspbury RA, Prescott MC, Fisher MJ, Rees HH. Isoprenylation of polypeptides in the nematode Caenorhabditis elegans. Biochim Biophys Acta. 1998 Jun 15;1392(2-3):265-75. PubMed PMID: 9630668.

4. Zhang FL, Casey PJ. Protein prenylation: molecular mechanisms and functional consequences. Annu Rev Biochem. 1996;65:241-69. PubMed PMID: 8811180.
5. Gromov PS, Madsen P, Celis JE. Identification of isoprenyl modified proteins metabolically labeled with [3H]farnesyl- and [3H]geranylgeranyl-pyrophosphate. Electrophoresis. 1996 Nov;17(11):1728-33. PubMed PMID: 8982605.

**Pictures:** 

Immunofluorescence assay using anti-Farnesyl antibody on plasmids encoding isoprenylated protein and visualized using FITC-conjugated goat anti-rabbit antibody.



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