

## Product datasheet for **AM03134PU-N**

### AHNAK Mouse Monoclonal Antibody [Clone ID: EM-09]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	EM-09
Applications:	IF, IHC, IP, WB
Recommended Dilution:	<b>Western Blot.</b> <b>Positive Control:</b> HeLa Human cervix carcinoma cell line. <b>Immunocytochemistry</b> (Permeabilization is required). <b>Positive Control:</b> HeLa Human cervix carcinoma cell line. <b>Immunoprecipitation.</b> <b>Immunohistochemistry on Frozen Sections.</b>
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Bacterially expressed fragment of N-terminal domain of Human AHNAK1
Specificity:	The antibody reacts with AHNAK1, a 700 kDa multi-functional adaptor protein expressed mainly in epithelial cell, various types of muscle cells and immune cells.
Formulation:	PBS, pH~7.4 State: Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 15 mM Sodium Azide
Concentration:	lot specific
Purification:	Protein A Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b>
Stability:	Shelf life: one year from despatch.
Gene Name:	AHNAK nucleoprotein



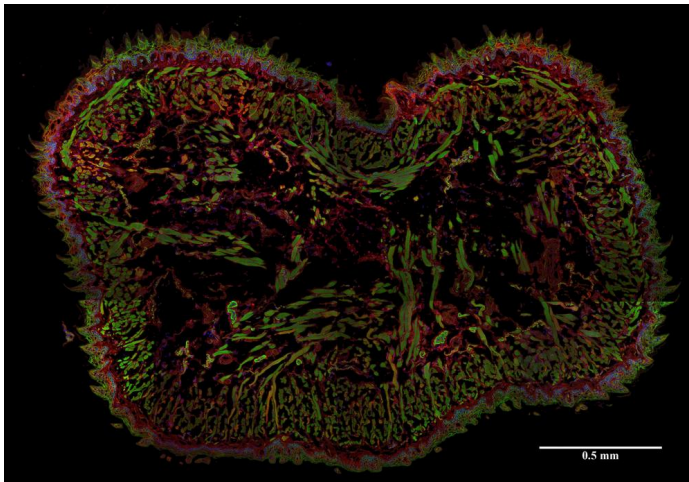
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Database Link: [Entrez Gene 79026 Human](#)  
[Q09666](#)

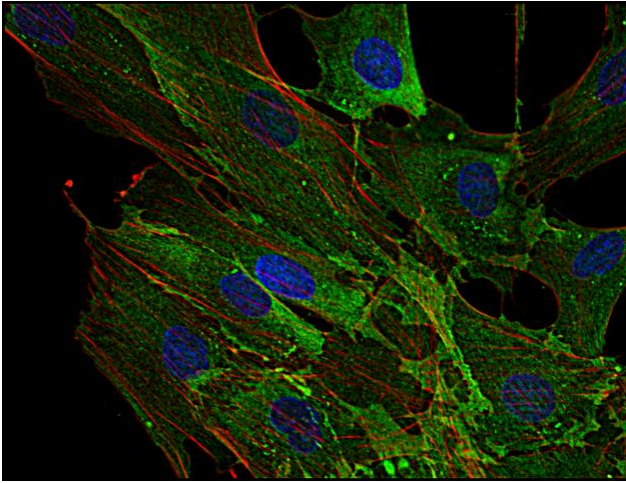
**Background:** AHNAK1 (Desmoyokin) is a large (700 kDa) scaffold protein that translocates to the plasma membrane after an increase of extracellular calcium level or upon protein kinase C activation and regulates extracellular calcium influx mediated by L-type  $\text{Ca}^{2+}$  channels. AHNAK1 has been implicated in diverse signal transduction processes affecting cell differentiation and proliferation. In response to calcium-dependent intercellular contacts AHNAK1 forms multimeric complexes in the plasma membrane, connected with actin and annexin 2/S100A10 assemblies and is thus involved in organization of the plasma membrane architecture. In epithelial cells, AHNAK1 is localized in cytoplasm or is membrane-associated, but in cells of nonepithelial origin AHNAK1 is predominantly nuclear; it has a weak DNA-binding activity and associates with the DNA-ligase IV-XRCC4 complex.

**Synonyms:** Desmoyokin

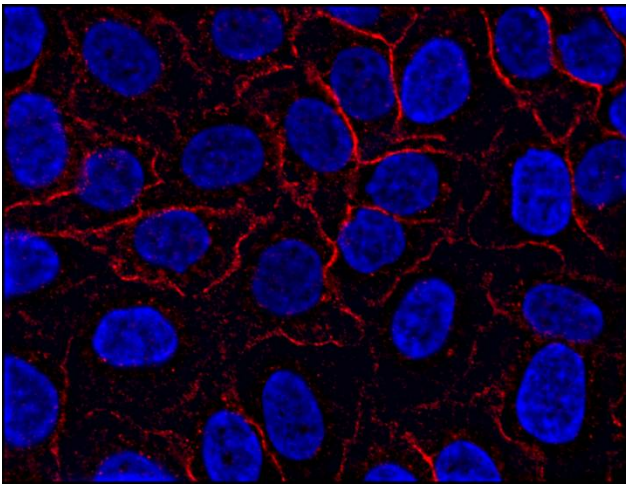
**Product images:**



Immunohistochemistry staining (frozen sections) of murine tongue by anti-AHNAK1 antibody (EM-09; red). Actin filaments were decorated by phalloidin (green), cell nuclei stained with DAPI (blue).



Immunofluorescence staining of AHNAK1 in human primary fibroblasts using anti-AHNAK1 (EM-09; green). Actin filaments were decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



Immunofluorescence staining of AHNAK1 in HeLa cell line using anti-AHNAK1 (EM-09; red). Cell nuclei stained with DAPI (blue).