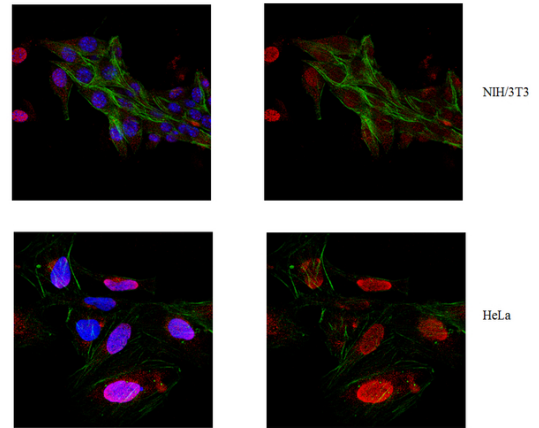


Polyclonal Antibody to ACF7/MACF1a - Aff - Purified

Alternate names:	620 kDa actin-binding protein, ABP620, Actin cross-linking family protein 7, Macrophin-1, Microtubule-actin cross-linking factor 1, Trabeculin-alpha, isoforms 1/2/3/5
Catalog No.:	AP56092PU-N
Quantity:	0.1 mg
Concentration:	lot-specific
Background:	Actin cross-linking family protein 7 (ACF7), also known as Microtubule-actin cross-linking factor 1, isoforms 1/2/3/5 (MACF1a) exists as 5 different isoforms. Isoform 2, also known as MACF1a, serves as an F-actin-binding protein, which may play a role in cross-linking actin to other cytoskeletal proteins. In migrating cells, MACF1a localizes to the plasma membrane and ruffles in a GSK3-, Memo-, and APC-dependent manner. MACF1a localization is required for microtubule capture at the cell cortex downstream of ErbB2 signaling. Upon binding with AXIN1, beta-catenin, GSK3beta, and APC, MACF1a translocates this multi-complex from the cytoplasm to the cell membrane. MACF1a acts as a positive regulator of Wnt-induced TCF/beta-catenin-dependent transcriptional activation. It also plays an important role in wound healing, epidermal cellular migration, CNS development, and the polarization and coordinated movement of hair follicle stem cells.
Uniprot ID:	Q9UPN3-2
Host:	Rabbit
Immunogen:	KLH-conjugated linear peptide corresponding to human ACF7/MACF1a.
Format:	State: Liquid purified Ig fraction Purification: Affinity Chromatography Buffer System: 0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl with 0.05% sodium azide.
Applications:	Immunocytochemistry: A 1:500 dilution from a representative lot detected ACF7/MACF1a in NIH/3T3 and HeLa cells. Immunohistochemistry. Dot Blot. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Demonstrated to react with Human. Other Homologies: Bovine (75% sequence homology).
Storage:	Store undiluted at 2-8°C. Shelf life: one year from despatch.

Pictures:

Immunocytochemistry Analysis:
 Representative lot data.
 Confocal fluorescent analysis of NIH/3T3 and HeLa cells using a 1:500 dilution of Cat. No. AP56092PU-N, Anti-ACF7/MACF1a and a Donkey Anti-Rabbit IgG secondary antibody conjugated to Cy3 (Red). Actin filaments have been labeled with Alexa Fluor® 488 dye (Green). Nucleus is stained with DAPI (Blue). This antibody positively stains the perinuclear region and vesicular-like structures



Immunohistochemistry Analysis:
 Representative lot data.
 Formalin Fixed Paraffin Embedded (FFPE) human heart (Fig. 1) melanoma (Fig. 2), cardiac myocyte (Fig. 3), and keratinocyte (Fig. 4) tissues were probed using heat-induced epitope retrieval (HIER). Immunostaining was performed using a 1:250 dilution of Cat. No. AP56092PU-N, Anti-ACF7/MACF1a. Reactivity was detected using an Anti-Rabbit secondary antibody and HRP-DAB. Positive cytoplasmic staining was observed in human heart and cardiac myocyte tissues. Diffuse cytoplasmic and granular cytoplasmic staining was observed in human melanoma and keratinocyte tissues, respectively

