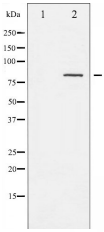
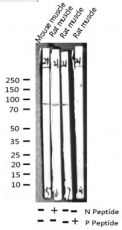
Phospho-Caldesmon (Ser789) Ab

Cat.#: AF3411	Concn.: 1mg/ml	Mol.Wt.: 80kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

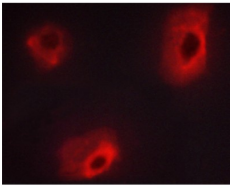
Application:	WB 1:500-1:2000 IHC 1:50-1:200 IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-Caldesmon (Ser789) Ab detects endogenous levels of Caldesmon only when phosphorylated at Serine 789
Immunogen:	A synthesized peptide derived from human Caldesmon around the phosphorylation site of Serine 789
Uniprot:	Q05682
Description:	This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction.
Subcellular Location:	Cytoplasm > cytoskeleton. Cytoplasm > myofibril. On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle).
Tissue Specificity:	High-molecular-weight caldesmon (isoform 1) is predominantly expressed in smooth muscles, whereas low-molecular-weight caldesmon (isoforms 2, 3, 4 and 5) are widely distributed in non-muscle tissues and cells. Not expressed in skeletal muscle or heart.
Similarity:	The N-terminal part seems to be a myosin/calmodulin-binding domain, and the C-terminal a tropomyosin/actin/calmodulin-binding domain. These two domains are separated by a central helical region in the smooth-muscle form.Belongs to the caldesmon family.
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt



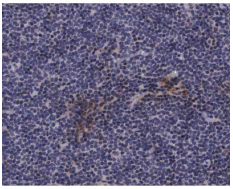
Western blot analysis of Caldesmon phosphorylation expression in EGF treated HeLa whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



Western blot analysis of Phospho-Caldesmon (Ser789) expression in various lysates



AF3411 staining HeLa cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37°C. The primary Ab was diluted 1/400 and incubated with the sample for 1 hour at 37°C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary Ab.



AF3411 at 1/200 staining human lymph nodes tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

AF3411 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab(Cat.# S0006), diluted at 1/600, was used as secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.