

Store at
4°C

#36110

α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (Alexa Fluor[®] 594 Conjugate)



Cell Signaling
TECHNOLOGY[®]

Support: +1-978-867-2388 (U.S.)
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Entrez-Gene ID #59
UniProt ID #P62736

New 04/19

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications
IF-F
Endogenous

Species Cross-Reactivity*
H, M, R

Isotype
Rabbit IgG

Description: This Cell Signaling Technology antibody is conjugated to Alexa Fluor[®] 594 fluorescent dye and tested in-house for direct immunofluorescent analysis in mouse tissue. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb #19245.

Background: Actin proteins are major components of the eukaryotic cytoskeleton. At least six vertebrate actin isoforms have been identified. The cytoplasmic β - and γ -actin proteins are referred to as "non-muscle" actin proteins as they are predominantly expressed in non-muscle cells where they control cell structure and motility (1). The α -cardiac and α -skeletal actin proteins are expressed in striated cardiac and skeletal muscles, respectively. The smooth muscle α -actin and

γ -actin proteins are found primarily in vascular smooth muscle and enteric smooth muscle, respectively. The α -smooth muscle actin (ACTA2) is also known as aortic smooth muscle actin. These actin isoforms regulate the contractile potential of muscle cells (1).

Specificity/Sensitivity: α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (Alexa Fluor[®] 594 Conjugate) recognizes endogenous levels of total α -smooth muscle protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human α -smooth muscle actin protein.

Storage: Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

*Species cross-reactivity is determined by western blot using the unconjugated antibody.

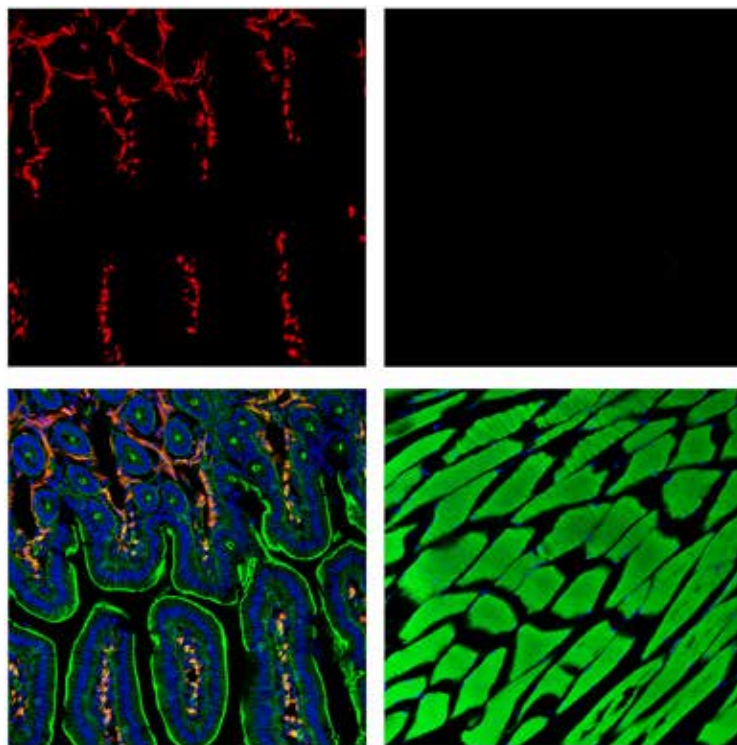
Recommended Antibody Dilutions:

Immunofluorescence (IF-F)	1:50
Fixative:	4% Formaldehyde
Permeabilization:	0.3% Triton X-100

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.

Background References:

(1) Herman, I.M. (1993) *Curr Opin Cell Biol* 5, 48-55.



Confocal immunofluorescent analysis of mouse small intestine (left) and skeletal muscle (right) using α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (Alexa Fluor[®] 594 Conjugate) (red). Actin filaments were labeled with DyLight[™] 488 Phalloidin #12935 (green). Samples were mounted in ProLong[®] Gold Antifade Reagent with DAPI #8961 (blue).

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.