

Store at
-20°C

#68463

α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (HRP Conjugate)

Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/supportOrders: 877-616-2355 (U.S.)
orders@cellsignal.comEntrez-Gene ID #59
UniProt ID #P62736

New 11/17

For Research Use Only. Not For Use In Diagnostic Procedures.**Applications**
W
Endogenous**Species Cross-Reactivity**
H, M, R**Molecular Wt.**
42 kDa**Isotype**
Rabbit IgG

Description: This Cell Signaling Technology antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups. The HRP conjugated 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).

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

Specificity/Sensitivity: α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (HRP 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 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

HRP-conjugated antibodies do not require incubation with a secondary antibody.

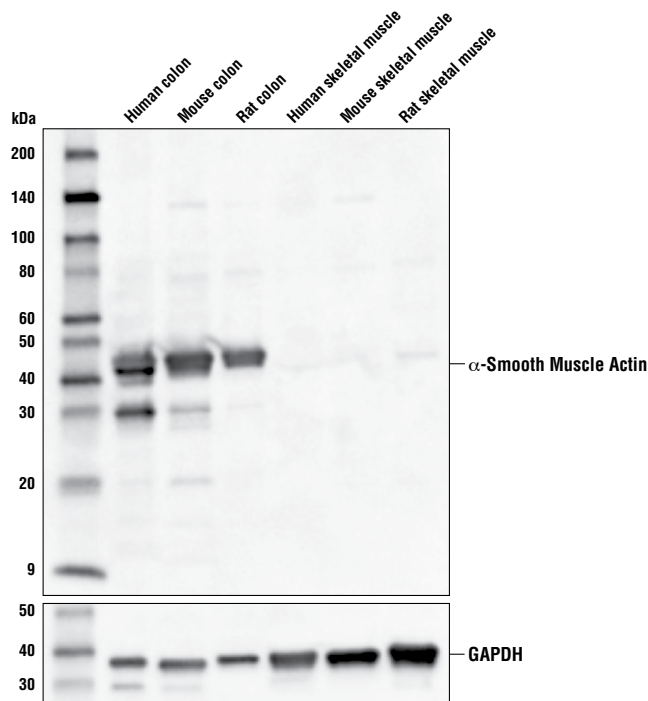
Recommended Antibody Dilutions:

Western blotting

1:1000

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

Western blot analysis of extracts from various human, mouse, and rat tissues using α -Smooth Muscle Actin (D4K9N) XP[®] Rabbit mAb (HRP Conjugate) (upper) and GAPDH #5174 (lower). As expected, skeletal muscle samples are negative for α -smooth muscle actin.



Tween is a registered trademark of ICI Americas, Inc.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween[®]20 at 4°C with gentle shaking, overnight.

Thank you for your recent purchase. If you would like to provide a review visit cellsignal.com/comments.

www.cellsignal.com

© 2017 Cell Signaling Technology, Inc.

XP and Cell Signaling Technology are trademark of Cell Signaling Technology, Inc.

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.