

Anti-Smoothelin [R4A] Bulk Size Ab03355-23.0-BT

Isotype and Format: Rabbit IgG, Kappa

Clone Number: R4A

Alternative Name(s) of Target:

UniProt Accession Number of Target Protein: P53814

Published Application(s): ICC, WB, IHC

Published Species Reactivity: canine, Chicken, Feline, Monkey, Swine, Human

Immunogen: The original antibody was generated by immunizing a BALB/c mouse with a cytoskeletal extract of chicken gizzard.

Specificity: The antibody reacts with the 59 kDa and 100 kDa protein, corresponding to smoothelin A and B, respectively, which are exclusively found in smooth muscle cells. Smoothelin is a constituent of the smooth muscle cell (SMC) cytoskeleton. Antibodies directed to smoothelin are useful tools to monitor SMC differentiation.

Application Notes: The antibody detected Smoothelin by western blot analysis. This antibody was used for immunohistochemical screening of different species and tissues (i.e., intestinal smooth muscle tissue of human, goat, *Xenopus laevis*, and chicken oesophagus, human large intestine, stomach, uterus, and prostate, smooth muscle cells) for the presence of smoothelin. COS7 cells transfected with the full-size human smoothelin cDNA showed filamentous structures that were reactive with the antibody in immunofluorescence analysis (van der Loop et al., 1996; PMID: 8707825). This antibody was used for immunohistochemistry on normal smooth muscle (Coco et al., 2009; PMID: 19950405).

Antibody First Published in: van der Loop et al. Smoothelin, a novel cytoskeletal protein specific for smooth muscle cells *J Cell Biol.* 1996 Jul;134(2):401-11. [PMID:8707825](#)

Note on publication: The original paper describes the generation and characterization of the antibody.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration:

1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.