



Mouse Anti-Human Actin (Muscle Specific) monoclonal antibody, clone JID616 (CABT-L2799)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human Actin, Muscle Specific
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID616
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Skeletal Muscle
Format	Liquid
Size	Predilut: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml

Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA
Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Actin is part of the cytoskeletal system of every cell type. It can be classified based on isoelectric points as alpha, beta, and gamma. Muscle Specific Actin includes those of the alpha and gamma isotypes. Skeletal, smooth, and cardiac muscle cells will all stain positively with Anti-Muscle specific actin, but mesenchymal cells, not including myoepithelium, will stain negatively. Normal and neoplastic non-muscle cells, including vascular endothelial and connective tissues, carcinomas, melanomas, and lymphomas, will also be negative for Muscle specific actin. The use of Anti-muscle specific actin in concert with Anti-smooth muscle actin can allow for differentiation between rhabdomyosarcoma and leiomyosarcoma, as Muscle specific actin is found in rhabdomyoblasts, while smooth muscle actin is found in leiomyosarcomas.
Keywords	ACTN4;actinin, alpha 4;focal segmental glomerulosclerosis 1 , FSGS1;alpha-actinin-4;actinin alpha4 isoform;non-muscle alpha-actinin 4;F-actin cross-linking protein;focal segmental glomerulosclerosis 1;FSGS;FSGS1;ACTININ-4;DKFZp686K23158;

GENE INFORMATION

Gene Name	ACTG2 actin, gamma 2, smooth muscle, enteric [Homo sapiens (human)]
Official Symbol	ACTG2
Synonyms	ACTG2; actin, gamma 2, smooth muscle, enteric; ACT; ACTE; VSCM; ACTA3; ACTL3; ACTSG; actin, gamma-enteric smooth muscle; alpha-actin-3; actin-like protein;
Entrez Gene ID	72
Protein Refseq	NP_001186822
UniProt ID	P63267
Chromosome Location	2p13.1
Pathway	Muscle contraction; Smooth Muscle Contraction; Vascular smooth muscle contraction;

Function

ATP binding;