## Sarcomeric Actinin Alpha 2 / ACTN2 Monoclonal Mouse Antibody (ACTN2/3295)



## **Product Description**

Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In non-muscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a muscle-specific, alpha actinin isoform that is expressed in both skeletal and cardiac muscles. Several transcript variants encoding different isoforms have been found for this gene.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Product attributes				
Antibody number	#3295			
Antibody reactivity (target)	ACTN2, Sarcomeric Actinin Alpha 2			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	ACTN2/3295			
Isotype	IgG2b, kappa			
Molecular weight	103 kDa			
Synonyms	Actin binding protein; Alpha actinin skeletal muscle; isoform 2; CMD1AA; F-actin cross-linking protein			
Human gene symbol	ACTN2			
Entrez gene ID	88			
SwissProt	P35609			
Unigene	498178			
Immunogen	A recombinant fragment (aa557-692) o human ACTN2 protein (exact sequence is proprietary)			
Verified antibody applications	IHC (FFPE) (verified), WB (verified)			
Antibody target cellular	Cytoskeleton			
localization Species reactivity	Human			
Positive control	Skeletal or Cardiac Muscle.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide			
Validated in protein array	Monospecific			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Cell/tissue expression	Muscle			

Call us: 800-304-5357 Email: btinfo@biotium.com

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	Laser line 405	Detection channel DAPI (microscopy), AF405	Dye Features <a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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