

## Product Datasheet

### Actin alpha 1 Antibody / ACTA1 (orb2634931)

<b>Catalog Number</b>	orb2634931
<b>Category</b>	Antibodies
<b>Description</b>	<p>All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. a-Actin expression is limited to various types of muscle, whereas b and g are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion, Rac regulates Actin filament accumulation at the plasma membrane and Cdc42 stimulates formation of filopodia.</p>
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Mouse
<b>Isotype</b>	Mouse IgG1, kappa
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human
<b>Purification</b>	Protein A/G affinity
<b>Immunogen</b>	Recombinant human ACTA1 protein was used as the immunogen for the Actin alpha 1 antibody.
<b>UniProt ID</b>	<b>P68133</b>
<b>Tested applications</b>	IHC-P, WB

#### Biorbyt Ltd.

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

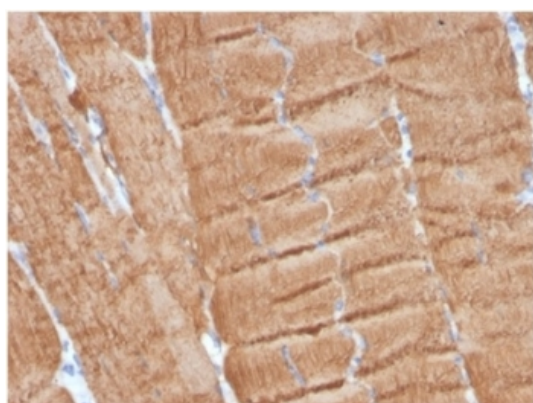
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

#### Biorbyt LLC

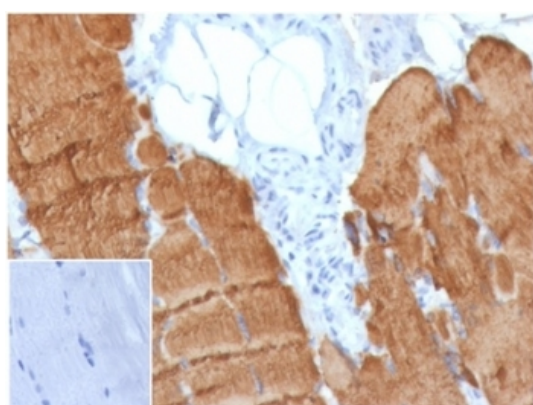
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

<b>Dilution range</b>	Immunohistochemistry (FFPE): 1-2ug/ml, Western blot: 2-4ug/ml
<b>Application notes</b>	Optimal dilution of the Actin alpha 1 antibody should be determined by the researcher.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	ACTA1/360
<b>Formula</b>	1 mg/ml in 1X PBS; BSA free, sodium azide free
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only



IHC staining of FFPE human skeletal muscle with Actin alpha 1 antibody (clone ACTA1/360). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human skeletal muscle tissue with Actin alpha 1 (clone ACTA1/360). Negative control inset: PBS instead of primary antibody to control for secondary binding. HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

#### **Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

#### **Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)