

### Datasheet: VMA00694KT

Description:	BETA-III SPECTRIN ANTIBODY WITH CONTROL LYSATE
Specificity:	BETA-III SPECTRIN
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Isotype:	lgG2b
Quantity:	2 Westerns

### **Product Details**

### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	•			1/1000

**PrecisionAb antibodies have been extensively <u>validated for the western blot application.</u> The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.** 

Target Species	Human		
Species Cross Reactivity	Reacts with: Mouse  N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG - Liquid		
Preparation	20μl Mouse monoclonal antibody affinity purified on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
Immunogen	Recombinant protein of partial human beta-III spectrin (amino acids 356-475)		
External Database Links	UniProt:  O15020 Related reagents  Entrez Gene:  6712 SPTBN2 Related reagents		
Synonyms	KIAA0302		

Specificity	<b>Mouse anti Human beta-III spectrin antibody</b> recognizes the beta-III spectrin, also known as SCA5.
	Spectrins are principle components of a cell's membrane-cytoskeleton and are composed of two alpha and two beta spectrin subunits. The protein encoded by SPTBN2 (SPTBN2), is called spectrin beta non-erythrocytic 2 or beta-III spectrin. It is related to, but distinct from, the beta-II spectrin gene which is also known as spectrin beta non-erythrocytic 1 (SPTBN1). SPTBN2 regulates the glutamate signaling pathway by stabilizing the glutamate transporter EAAT4 at the surface of the plasma membrane. Mutations in SPTBN2 cause a form of spinocerebellar ataxia, SCA5, that is characterized by neurodegeneration, progressive locomotor incoordination, dysarthria, and uncoordinated eye movements (provided by RefSeq, Dec 2009).
	Mouse anti Human beta-III spectrin antibody detects a band of 270 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.
Western Blotting	Mouse anti beta-III spectrin detects a band of approximately 270 kDa in HepG2 cell lysates
Instructions For Use	Please refer to the <u>PrecisionAb western blotting protocol.</u> For additional information on secondary antibody dilution and exposure time see product web page.
Lysate Composition	400μg HepG2 lysate lyophilized in RIPA buffer
Lysate Reconstitution	<ul> <li>If using DDT reconstitute the lyophilized lysate with 190μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample Buffer and 10μl 2M DTT.</li> <li>If using BME reconstitute the lyophilized lysate with 180μl DI H<sub>2</sub>O, add 200μl 2x Laemmli Sample Buffer and 20μl BME.</li> <li>Heat at 95°C for 5 minutes. For 10 well mini gels load 25μl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.</li> </ul>
Storage	Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
	Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.
Guarantee	As supplied, 12 months from date of despatch
Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories
Health And Safety Information	Material Safety Datasheet documentation #10040 #10561 available at: Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> Lysate Material (10561): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</a>
Regulatory	For research purposes only

# **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (H/L) (STAR207...) HRP

**Recommended Negative Controls** 

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

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