

# Product Datasheet

## Cytochrome c Antibody (SPM389) [Alexa Fluor® 405] NBP2-47692AF405

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-47692AF405**

Cytochrome c Antibody (SPM389) [Alexa Fluor® 405]

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C in the dark.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	SPM389
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG2b Kappa
<b>Conjugate</b>	Alexa Fluor 405
<b>Purity</b>	Protein A or G purified
<b>Buffer</b>	50mM Sodium Borate
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene ID</b>	54205
<b>Gene Symbol</b>	CYCS
<b>Species</b>	Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon
<b>Reactivity Notes</b>	Frog
<b>Marker</b>	Mitochondrial Marker
<b>Specificity/Sensitivity</b>	It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e cytochrome in the mitochondria with heme attached).
<b>Immunogen</b>	Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of pigeon cytochrome c (Uniprot: P99999)

<b>Notes</b>	<p>Alexa Fluor (R) products are provided under an intellectual property license from Life Technologies Corporation. The purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment; (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or <a href="mailto:outlicensing@lifetech.com">outlicensing@lifetech.com</a>. This conjugate is made on demand. Actual recovery may vary from the stated volume of this product. The volume will be greater than or equal to the unit size stated on the datasheet.</p>
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<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Application Notes</b>	Optimal dilution of this antibody should be experimentally determined.



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### Products Related to NBP2-47692AF405

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NBP1-43317AF405	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b) [Alexa Fluor® 405]
210-TA-005	TNF-alpha [Unconjugated]
MCTC0	Cytochrome c [HRP]
AF835	Caspase-3 Antibody [Unconjugated] - Active

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### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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