

GMP FITC anti-Cytochrome c Antibody

Catalog# / Size	260100 / 100 tests
Clone	6H2.B4
Other Names	Cyt c
Isotype	Mouse IgG1, κ
Description	Cytochrome c is a 15 kD protein found in the mitochondrial intermembrane space with a heme-binding domain. Cytochrome c is a component of the electron transport chain; the heme group transfers electrons from cytochrome b-c1 complex to cytochrome oxidase complex. Cytochrome c initiates apoptosis by release to cytoplasm and binding Apaf-1 which activates procaspase 9. Cytochrome c interacts with the cytochrome b-c1 complex, cytochrome oxidase complex, heme, Apaf-1, and Caspase 9 proteins. The 6H2.B4 monoclonal antibody recognizes human, mouse, and rat cytochrome-c and has been shown to be useful for intracellular flow cytometric staining, Western blotting, immunoprecipitation, and immunofluorescence staining.

Product Details

Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Rat cyt c-OVA
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide, 0.2% (w/v) BSA (origin USA) and a stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.
Concentration	200 µg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: intracellular flow cytometry ⁵ , immunofluorescence microscopy ^{3,5} , immunoprecipitation ⁴ , and immunocytochemistry ⁵ .
Application References	<ol style="list-style-type: none"> Goshorn SC, <i>et al.</i> 1991. <i>J. Biol. Chem.</i> 266:2134. Jemmerson R, <i>et al.</i> 1991. <i>Eur. J. Immunol.</i> 21:143. Chandra D, <i>et al.</i> 2002. <i>J. Biol. Chem.</i> 277:50842. (IF) Semenkova L, <i>et al.</i> 2003. <i>Eur. J. Biochem.</i> 270:4388. (IP) Shih S-F, <i>et al.</i> 2001. <i>J. Biol. Chem.</i> 276:21870. (ICFC ICC IF) She P, <i>et al.</i> 2011. <i>Am J. Physiol Endocrinol Metab.</i> 301:E49. PubMed McGuire, KA., <i>et al.</i> 2011. <i>J. Virol</i> 85:10806. PubMed
(PubMed link indicates BioLegend citation)	
Disclaimer	<p>GMP RUO Flow Cytometry Antibodies. BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:</p> <ul style="list-style-type: none"> • Batch-to-batch consistency • Material traceability • Documented procedures

- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

Antigen Details

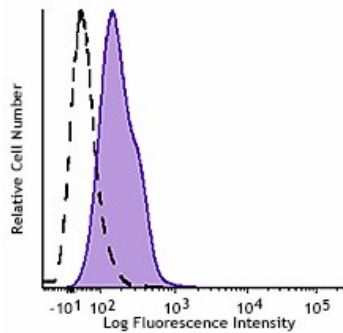
Structure	Heme binding domain; 15 kD
Distribution	Mitochondrial intermembrane space
Function	Component of electron transport chain; heme group transfers electrons from cytochrome b-c1 complex to cytochrome oxidase complex. Initiates apoptosis by release to cytoplasm and binding Apaf-1 which activates procaspase 9
Interaction	Cytochrome b-c1 complex, cytochrome oxidase complex, heme, Apaf-1, Casp9
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Mitochondrial Function, Neuroscience, Neuroscience Cell Markers
Molecular Family	Mitochondrial Markers
Antigen References	<ol style="list-style-type: none">1. Liu X, <i>et al.</i> 1996. <i>Cell</i>. 86:147.2. Li P, <i>et al.</i> 1997. <i>Cell</i>. 91:479.3. Zhang Z, <i>et al.</i> 2003. <i>Gene</i> 312:61.4. Ferguson H, <i>et al.</i> 2003. <i>J. Biol. Chem.</i> 278:45793.
Gene ID	1355

Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-Cytochrome c, FITC anti-Cytochrome c, Purified anti-Cytochrome c, Alexa Fluor® 488 anti-Cytochrome c, Alexa Fluor® 647 anti-Cytochrome c



Typical quality control results from intracellular staining of monocytes in human peripheral blood mononuclear cells either with 6H2.B4 FITC used at 5 μ L/test (filled histogram) or with an isotype control (open histogram).

Symbols Glossary*

Symbol	Meaning	Symbol Title	Symbol No.	Symbol	Meaning	Symbol Title	Symbol No.
	Catalog number	Catalogue number	5.1.6		Indicates the need for the user to consult the instructions for use.	Consult instructions for use	5.4.3
	Indicates the temperature limits to which the medical device can be safely exposed.	Temperature limit	5.3.7		Indicates a medical device that needs protection from light sources.	Keep away from sunlight	5.3.2
	Indicates the upper limit of temperature to which the medical device can be safely exposed.	Upper limit of temperature	5.3.6		Indicates the date after which the medical device is not to be used.	Use-by date	5.1.4
	Indicates the medical device manufacturer.	Manufacturer	5.1.1		Indicates the authorized representative in the European Community.	Authorized representative in the European Community	5.1.2
	Indicates the manufacturer's batch code so that the batch or lot can be identified.	Batch code	5.1.5		Indicates a medical device that is intended to be used as an in vitro diagnostic medical device.	<i>In vitro</i> diagnostic medical device	5.5.1

* Symbol information is from EN ISO 15223-1:2016 Medical devices – Symbols to be used with medical device labels, labelling and information to be supplied – Part 1: General requirements

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