
Anti-Grim-19 FITC

Catalog Number: 11-9937

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information



Contents: Anti-Grim-19 FITC

Catalog Number: 11-9937

Clone: 1A8

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG2b



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.

Batch Code: Refer to vial

Use By: Refer to vial



Description

This 1A8 monoclonal antibody reacts with human, mouse, and rat Grim-19. This 16 kDa protein is expressed in many human tissues, especially in the heart and skeletal muscle. Lower expression levels of Grim-19 can be observed in the liver, kidney, and brain. Originally described as a nuclear protein, reports indicate that Grim-19 is primarily localized to mitochondria as an essential component of complex I of the electron transport chain. Grim-19 expression can be induced by interferon- β and all-*trans*-retinoic acid in tumor cell lines, leading to cell death. Finally, Grim-19 has been shown to bind the transactivation domain of STAT3 and inhibit its transcriptional activity. The molecular mechanisms of how Grim-19 regulates STAT3 within the cell remains under active investigation.

Applications Reported

This 1A8 antibody has been reported for use in immunohistochemical staining of formalin-fixed paraffin embedded tissue sections and immunocytochemistry.

Applications Tested

This 1A8 antibody has been tested by immunocytochemistry of fixed and permeabilized HeLa cells. This can be used at less than or equal to 2 μ g/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Huang G, Lu H, Hao A, Ng DC, Ponniah S, Guo K, Lufei C, Zeng Q, Cao X. GRIM-19, a cell death regulatory protein, is essential for assembly and function of mitochondrial complex I. *Mol Cell Biol.* 2004 Oct;24(19):8447-56.

Zhang J, Yang J, Roy SK, Tininini S, Hu J, Bromberg JF, Poli V, Stark GR, Kalvakolanu DV. The cell death regulator GRIM-19 is an inhibitor of signal transducer and activator of transcription 3. *Proc Natl Acad Sci U S A.* 2003 Aug 5;100(16):9342-7. (1A8, WB, IP)

Hu J, Angell JE, Zhang J, Ma X, Seo T, Raha A, Hayashi J, Choe J, Kalvakolanu DV. Characterization of monoclonal antibodies against GRIM-19, a novel IFN-beta and retinoic acid-activated regulator of cell death. *J Interferon Cytokine Res.* 2002 Oct;22(10):1017-26. (1A8, WB)

Angell JE, Lindner DJ, Shapiro PS, Hofmann ER, Kalvakolanu DV. Identification of GRIM-19, a novel cell death-regulatory gene induced by the interferon-beta and retinoic acid combination, using a genetic approach. *J Biol Chem.* 2000 Oct 27;275(43):33416-26.

Related Products

11-4732 Mouse IgG2b K Isotype Control FITC

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