Human Jarid1A Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 1102542

Catalog Number: FAB11705N

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human Jarid1A/KDM5a protein in Direct ELISA.
Source	Monoclonal Mouse IgG_{2A} Clone # 1102542
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Jarid1A/KDM5A Lys127-Ser287 Accession # P29375
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Jarid1A (also known as KDM5A) is a protein of approximately 175kDa that belongs to the Jumonji/ARID1 (JARID) protein family. It functions primarily as a lysine demethylase, involved in the regulation of histone H3 lysine 4 (H3K4) demethylation, thereby playing a crucial role in chromatin remodeling and epigenetic regulation. Jarid1A is implicated in multiple biological processes, including cell cycle progression, differentiation, and development. Dysregulation of Jarid1A is associated with various pathologies, particularly its overexpression in several types of cancer, where it contributes to tumorigenesis, cancer cell proliferation, and metastasis. It is also linked to altered gene expression profiles in neurological disorders. The role of Jarid1A in transcriptional regulation highlights its potential as a therapeutic target and biomarker for cancer and other diseases involving epigenetic dysregulation.

References:

1. Harmeyer KM, Facompre ND, Herlyn M, Basu D. JARID1 Histone Demethylases: Emerging Targets in Cancer. Trends Cancer. 2017 Oct;3(10):713-725. doi: 10.1016/j.trecan.2017.08.004. Epub 2017 Sep 12. PMID: 28958389; PMCID: PMC5679451.
2. Yang GJ, Zhu MH, Lu XJ, Liu YJ, Lu JF, Leung CH, Ma DL, Chen J. The emerging role of KDM5A in human cancer. J Hematol Oncol. 2021 Feb 17;14(1):30. doi: 10.1186/s13045-021-01041-1. PMID: 33596982; PMCID: PMC7888121.

PRODUCT SPECIFIC NOTICES

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