Human Lysine (K)-specific Demethylase 5B/KDM5B Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6477

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human KDM5B in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human KDM5B Leu819-Arg918 Accession # Q9UGL1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

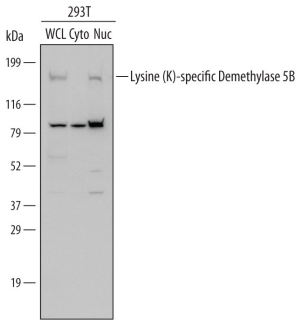
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

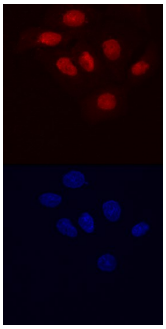
DATA

Western Blot



Detection of Human Lysine (K)-specific Demethylase 5B/KDM5B by Western Blot. Western blot shows lysates of 293T human embryonic kidney cell line. PVDF Membrane was probed with 1 µg/mL of Human Lysine (K)-specific Demethylase 5B/KDM5B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6477) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Lysine (K)-specific Demethylase 5B/KDM5B at approximately 170 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Lysine (K)-specific Demethylase 5B/KDM5B in BT-20 Human Cell Line. Lysine (K)-specific Demethylase 5B/KDM5B was detected in immersion fixed BT-20 human breast cancer cell line using Human Lysine (K)-specific Demethylase 5B/KDM5B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6477) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

KDM5B (also JARID1B, RBP2-H1 and PLU-1) is a 170-200 kDa member of the JARID1 histone demethylase family of proteins. It is a transcriptional repressor that is highly expressed in Sertoli cells and mammary epithelium during pregnancy, and interacts with BF-1 and PAX9. KDM5B is reported to demethylate tri- and di-methylated Lys4 on histone H3. It has no activity on Lys9 or 27. Human KDM5B is 1544 amino acids (aa) in length. It contains a jumonji N domain (aa 32-73), an ARID DNA binding region (aa 97-187), a PHD domain (aa 309-359), a jumonji C domain (aa 486-602), one C5HC2 motif (aa 692-745), and two consecutive PHD domains (aa 1176-1538). There are three utilized phosphorylation sites at Ser1383, 1384 and 1405.There are three potential splice variants. Two show a premature truncation after Pro1433 coupled to an alternative start site at either Met396 or Met159. A third contains a 36 aa insertion after Glu237. Over aa 819-918, human KDM5B shares 96% aa identity with mouse KDM5B.

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