

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Lysine (K)-specific Demethylase 6B/KDM6B in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Lysine (K)-specific Demethylase 6B/KDM6B (isoform 1) Pro1530-Arg1682 Accession # NP_001073893
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.

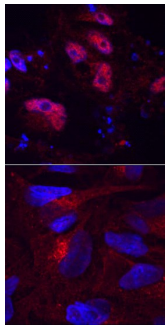
APPLICATIONS

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
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



Lysine (K)-specific Demethylase 6B/KDM6B in BG01V Human Stem Cells. Lysine (K)-specific Demethylase 6B/KDM6B was detected in immersion fixed BG01V human embryonic stem cells, differentiated (upper panel) and undifferentiated (lower panel) using Goat Anti-Human Lysine (K)-specific Demethylase 6B/KDM6B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7300) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). 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. <ul style="list-style-type: none"> • 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

KDM6B (Lysine [K]-specific demethylase 6B; also JMJD3) is a 170-185 kDa member of the UTX family of enzymes. It is expressed in both embryo and adult, and specifically demethylates tri- and di-methylated Lys27 on histone H3 (H3K27). Methylation of H3K27 by PRC2 inactivates genes, while demethylation of methylated H3K27 by KDM6B activates genes. Human KDM6B is 1643 amino acids (aa) in length. It contains two Pro-rich regions (aa 32-85 and 1046-1082) plus one jumonji domain (aa 1339-1502). One potential splice variant is reported that contains a 39 aa insertion after Leu1636. Over aa 1530-1682, which is a sequence that contains the 39 aa insertion, human KDM6B shares 75% aa sequence identity with mouse KDM6B. When the insertion is disregarded, human and mouse KDM6B are identical in aa sequence over the above range of amino acids.