

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                  |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human KDM5B in Western blots.                                                  |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                   |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                              |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human KDM5B<br>Leu819-Arg918<br>Accession # Q9UGL1 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm        |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

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

#### 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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