Recombinant FBXL10 / KDM2B protein

**Catalog No:** 31455, 31855  
**Expressed In:** Baculovirus  
**Quantity:** 20 µg  
**Concentration:** 0.3 µg/µl  
**Source:** Human

**Buffer Contents:** Full length recombinant FBXL10 / KDM2B protein expressed in Sf9 cells at a concentration of 0.3 µg/µl in 25 mM HEPES-NaOH, pH 7.5, 300 mM NaCl, 5% glycerol and 0.2 mg/ml 3x FLAG peptide.

**Background:** KDM2B (lysine (K)-specific demethylase 2B), also known as FBXL10 (F-box and leucine-rich repeat protein 10) is a histone demethylase that preferentially demethylates trimethylated lysine 4 (K4me3) and dimethylated lysine 36 (K36me2) of histone H3. KDM2B displays weak or no activity for mono- and trimethylated H3K36. KDM2B preferentially binds the transcribed region of ribosomal RNA and represses the transcription of ribosomal RNA genes which results in inhibition of cell growth and proliferation. KDM2B may also serve as a substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex.

**Protein Details:** Recombinant FBXL10 / KDM2B (accession number NP_115979.3) was expressed in Sf9 cells and contains an N-terminal 6xHis tag and FLAG tag. The molecular weight is 157.9 kDa. The recombinant protein is >75% pure by SDS-PAGE.

**Application Notes:** Recombinant FBXL10 / KDM2B is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. It is a Histone H3K36me2 demethylase with a catalytic activity of 3-4 turnovers / enzyme molecule.

**Histone Demethylase Assay Conditions:**
3.3 µM H3K36me2 peptide (aa 22-44) was incubated with 300 nM Recombinant FBXL10 / KDM2B protein in a reaction buffer containing 50 mM HEPES pH 7.5, 0.02% Triton X-100, 100 µM 2OG, 100 µM Ascorbate, 50 µM (NH4)2Fe(SO4)2·6H2O and 1 mM TCEP for 2 hours at room temperature. MALDI-TOF was used for detection.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.