

Recombinant JARID1C / KDM5C protein

Catalog No: 31433, 31833

Lot No: 20117003

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.5 µg/µl

Source: Human

Buffer Contents: Full length recombinant JARID1C / KDM5C protein is supplied at a concentration of 0.5 µg/µl in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 5% Glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

Background: **Lysine (K)-specific demethylase 5C (KDM5C)**, also known as **Jumonji, AT rich interactive domain 1C (JARID1C)**, is a member of the SMCY homolog family and encodes a protein with one ARID domain, one JmjC domain, one JmjN domain and two PHD-type zinc fingers. It is a histone demethylase that specifically demethylates lysine 4 of histone H3 (H3K4), thereby playing a central role in defining the histone code. KDM5B demethylates trimethylated and dimethylated, but not monomethylated H3K4. It does not demethylate histone H3K9, H3K27, H3K36, H3K79 or H4K20. KDM5C participates in transcriptional repression of neuronal genes by recruiting histone deacetylases and CoREST pAb at neuron-restrictive silencer elements. Mutations in KDM5C have been associated with X-linked mental retardation.

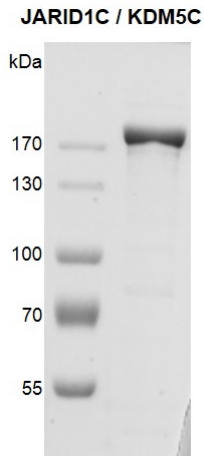
Protein Details: Recombinant human JARID1C / KDM5C was expressed in a baculovirus expression system as the full length protein (accession number NP_004178.2) with an N-terminal FLAG tag. The molecular weight of the protein is 180 kDa.

Application Notes: Recombinant JARID1C / KDM5C is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Histone Demethylase Assay Conditions: 50 mM HEPES pH 7.5, 0.02% Triton X100, 100 µM 2OG, 100 µM Ascorbate, 50 µM (NH₄)₂Fe(SO₄)₂·6H₂O, 1 mM TCEP, 100 nM Recombinant JARID1C / KDM5C protein, and 3.3 µM H3K4me₃ (aa 1-21) peptide at 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.

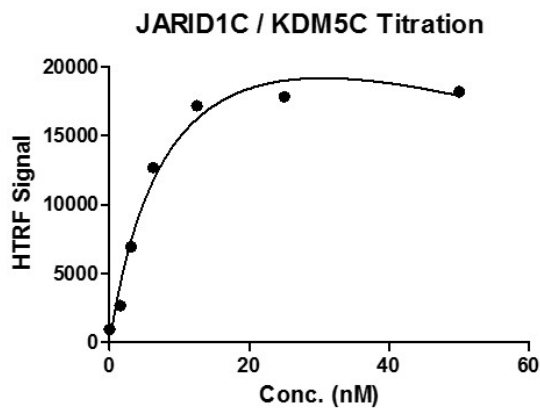


Recombinant JARID1C / KDM5C protein gel.

JARID1C / KDM5C protein was run on a 8% SDS-PAGE gel and stained with Coomassie Blue.

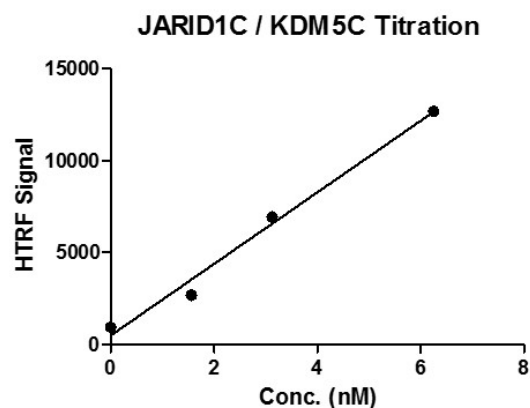
MW: 180 kDa

Purity: > 87%



HTRF assay for JARID1C / KDM5C activity.

1 μ M H3K4me3 peptide was incubated with JARID1C / KDM5C protein in reaction buffer for 1 hour at room temperature. H3K4me2 antibody was used to detect reaction product.



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