

Product datasheet for TP526095

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Rnf2 (NM 011277) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse ring finger protein 2 (Rnf2), with C-terminal MYC/DDK

tag, expressed in HEK293T cells, 20ug

Species: Mouse **Expression Host:** HEK293T

Expression cDNA Clone >MR226095 representing NM 011277 or AA Sequence: Red=Cloning site Green=Tags(s)

> MSQAVQTNGTQPLSKTWELSLYELQRTPQEAITDGLEIVVSPRSLHSELMCPICLDMLKNTMTTKECLHR FCADCIITALRSGNKECPTCRKKLVSKRSLRPDPNFDALISKIYPSRDEYEAHQERVLARINKHNNQQAL SHSIEEGLKIQAMNRLQRGKKQQIENGSGAEDNGDSSHCSNASTHSNQEAGPSNKRTKTSDDSGLELDNN NAAVAIDPVMDGASEIELVFRPHPTLMEKDDSAQTRYIKTSGNATVDHLSKYLAVRLALEELRSKGESNQ

MNLDTASEKQYTIYIATASGQFTVLNGSFSLELVSEKYWKVNKPMELYYAPTKEHK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK Predicted MW:

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

38.1 kDa

Stable for 12 months from the date of receipt of the product under proper storage and Stability:

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 035407

19821 Locus ID: UniProt ID: 09C0I4





Rnf2 (NM_011277) Mouse Recombinant Protein - TP526095

RefSeq Size: 3028 Cytogenetics: 1 G1 RefSeq ORF: 1008

Synonyms: Al326319; Al450156; AU019207; dinG; Ring1B

Summary: E3 ubiquitin-protein ligase that mediates monoubiquitination of 'Lys-119' of histone H2A

(H2AK119Ub), thereby playing a central role in histone code and gene regulation

(PubMed:15525528, PubMed:22325148, PubMed:28596365). H2AK119Ub gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals (PubMed:15525528, PubMed:28596365). May be involved in the initiation of both imprinted and random X inactivation (PubMed:15525528). Essential component of a Polycomb

group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the

transcriptionally repressive state of many genes, including Hox genes, throughout development (PubMed:22325148, PubMed:16710298). PcG PRC1 complex acts via chromatin remodeling and

(PubMed:15525528, PubMed:22325148, PubMed:16710298). E3 ubiquitin-protein ligase activity

modification of histones, rendering chromatin heritably changed in its expressibility

is enhanced by BMI1/PCGF4 (PubMed:16710298). Acts as the main E3 ubiquitin ligase on histone H2A of the PRC1 complex, while RING1 may rather act as a modulator of RNF2/RING2 activity (PubMed:15525528, PubMed:16710298). Plays a role in the transcriptional repression of genes that are required for pluripotency in embryonic stem cells, thereby contributing to differentiation of the ectodermal and endodermal germ layers (PubMed:22226355). Association with the chromosomal DNA is cell-cycle dependent. In resting B- and T-lymphocytes, interaction with AURKB leads to block its activity, thereby maintaining transcription in resting lymphocytes