

Product datasheet for MR211379L4

Rnf111 (BC069835) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rnf111 (BC069835) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Rnf111

Synonyms: ARK, Arkadia
Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

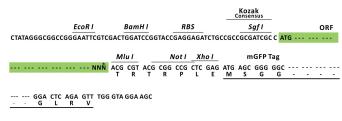
ORF Nucleotide The ORF insert of this clone is exactly the same as(MR211379).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: BC069835 **ORF Size:** 2943 bp



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Rnf111 (BC069835) Mouse Tagged Lenti ORF Clone - MR211379L4

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>BC069835</u>, <u>AAH69835</u>

RefSeq Size:4725 bpRefSeq ORF:2945 bpLocus ID:93836

Cytogenetics: 9 39.53 cM

Gene Summary: E3 ubiquitin-protein ligase required for mesoderm patterning during embryonic development

(PubMed:11298452). Acts as an enhancer of the transcriptional responses of the

SMAD2/SMAD3 effectors, which are activated downstream of BMP (PubMed:14657019). Acts by mediating ubiquitination and degradation of SMAD inhibitors such as SMAD7, inducing their proteasomal degradation and thereby enhancing the transcriptional activity of TGF-beta and BMP (PubMed:14657019). In addition to enhance transcription of SMAD2/SMAD3

effectors, also regulates their turnover by mediating their ubiquitination and subsequent degradation, coupling their activation with degradation, thereby ensuring that only effectors 'in use' are degraded (By similarity). Activates SMAD3/SMAD4-dependent transcription by triggering signal-induced degradation of SNON isoform of SKIL (By similarity). Associates with UBE2D2 as an E2 enzyme (By similarity). Specifically binds polysumoylated chains via SUMO

interaction motifs (SIMs) and mediates ubiquitination of sumoylated substrates

(PubMed:23530056). Catalyzes 'Lys-63'-linked ubiquitination of sumoylated XPC in response to UV irradiation, promoting nucleotide excision repair (By similarity). Mediates ubiquitination and degradation of sumoylated PML (PubMed:23530056). The regulation of the BMP-SMAD signaling is however independent of sumoylation and is not dependent of SUMO interaction

motifs (SIMs) (PubMed:23530056).[UniProtKB/Swiss-Prot Function]