

OriGene Technologies, Inc.

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Product datasheet for MR211639L3V

Trip12 (BC034113) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

| Product Type: | Lentiviral Particles |
|------------------------------|---|
| Product Name: | Trip12 (BC034113) Mouse Tagged ORF Clone Lentiviral Particle |
| Symbol: | Trip12 |
| Synonyms: | MGC31615 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-Myc-DDK-P2A-Puro (PS100092) |
| Tag: | Myc-DDK |
| ACCN: | BC034113 |
| ORF Size: | 3309 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(MR211639). |
| 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. <u>More info</u> |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| RefSeq: | <u>BC034113</u> , <u>AAH34113</u> |
| RefSeq Size: | 3945 bp |
| RefSeq ORF: | 3311 bp |
| Locus ID: | 14897 |
| Cytogenetics: | 1 C5 |



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CRIGENE Trip12 (BC034113) Mouse Tagged ORF Clone Lentiviral Particle – MR211639L3V

Gene Summary: E3 ubiquitin-protein ligase involved in ubiquitin fusion degradation (UFD) pathway and regulation of DNA repair. Part of the ubiquitin fusion degradation (UFD) pathway, a process that mediates ubiquitination of protein at their N-terminus, regardless of the presence of lysine residues in target proteins. In normal cells, mediates ubiquitination and degradation of isoform p19ARF/ARF of CDKN2A, a lysine-less tumor suppressor required for p53/TP53 activation under oncogenic stress. In cancer cells, however, isoform p19ARF/ARF and TRIP12 are located in different cell compartments, preventing isoform p19ARF/ARF ubiquitination and degradation. Does not mediate ubiquitination of isoform p16-INK4a of CDKN2A. Also catalyzes ubiquitination of NAE1 and SMARCE1, leading to their degradation. Ubiquitination and degradation of target proteins is regulated by interaction with proteins such as MYC, TRADD or SMARCC1, which disrupt the interaction between TRIP12 and target proteins. Acts as a key regulator of DNA damage response by acting as a suppressor of RNF168, an E3 ubiquitin-protein ligase that promotes accumulation of 'Lys-63'-linked histone H2A and H2AX at DNA damage sites, thereby acting as a guard against excessive spreading of ubiquitinated chromatin at damaged chromosomes.[UniProtKB/Swiss-Prot Function]

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