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Product datasheet for RN201469

Trip12 (NM_001031659) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trip12 (NM_001031659) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Trip12
Synonyms:	Gtl6; TRIP-12
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN201469 representing NM_001031659 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCCAACCGGCCTAATAACAATCCAGGGGGGTCACTGCGACGTTCACAGAGGAACACTGCCGGGGCCC AACCACAAGACGACTCAATAGGAGGAAGAAGCTGCAGTTCATCATCTGCTGTCATAGTTCCGCAACCAGA GGATCCAGACAGAGCCAATACTTCAGAAAGGCAGAAAACGGGGCAGGTGCCTAAAAAAGACAATTCTCGA GGAGTGAAACGCAGTGCTAGTCCAGACTACAACAGGACCAATTCTCCTAGCTCTGCGAAAAAGCCCAGAG CATTTCAGCATATTGAGTCTCTCTCAGAAACCAATAAGCCACCTAGTAAGTCAAAGAAGAGACATTTAGA CCAGGAGCAACAACTGAAATCTGCACAATTGCCGTCAACAAGCAAGGCTCACACCAGAAAGAGTGTGGCT GCTGGTAGTTCACGGAGTCAGAAAAGAAAAAGGACAGAGAGTTCTTGTGTTAAGAGTGGTTCTGGGTCCG AATCAACTGGTGCCGAAGAGAGATCTGCAAAACCCACCAAGCTGGCTTCAAAATCGGCCACCTCAGCCAA AGCTGGGTGTAGCACCATCACTGATTCTTCTTCTGCTGCCTCTACTTCCTCCTCATCTTCAGCTGTAGCC TCGGCCTCTTCTACTGTACCAGCAGGTGCCAGGGTGAAACAAGGAAAAGACCAGAACAAGGCCAGGCGCT CCCGCTCAGCATCCAGCCCTAGTCCCAGAAGAAGTAGCAGGGAAAAAGAACAGAGTAAAACTGGTGGCTC TTCAAAATTTGATTGGGCTGCTCGCTTCAGCCCCAAAGTTAGCCTGCCTAAAACAAAACTGTCTCTTCCA GGGTCTTCTAAGTCAGAGACATCAAAACCTGGACCTTCTGGATTACAGGCCAAATTAGCAAGTTTAAGAA AGTCTACCAAGAAGCGCAGTGAGTCTCCACCTGCTGAGCTCCCCAGTTTGAGGAGGAGCACACGCCAAAA GACCACGGGCTCCTGTGCTAGCACCAGTCGGCGAGGCTCTGGCCTGGGCAAGAGAGGAGCAGCTGAGGCC CGGAGGCAAGAGAAAATGGCAGACCCTGAAGGCAACCAGGAGACAGTAAATTCCTCAGCTGCTCGAACAG ATGAAGCTCCCCAAGGAGCTGCAGCCTCTAGTTCTGTTGCAGGGGCTGTTGGCATGACCACCTCTGGGGA GAGTGAATCCGATGATTCTGAGATGGGACGATTACAAGCTCTGTTAGAGGCCAGGGGTCTTCCTCCTCAC CTCTTTGGTCCTCTTGGTCCTCGGATGTCACAACTTTTCCATAGAACAATTGGAAGCGGAGCTAGTTCTA AGGCCCAGCAGCTTCTTCAAGGACTACAAGCCAGTGATGAAAGTCAACAGCTTCAGGCAGTCATTGAAAT GTGTCAGCTATTGGTCATGGGGAATGAAGAGACACTGGGAGGGTTTCCTGTGAAGAGTGTTGTTCCAGCT TTGATAACATTACTGCAGATGGAACATAATTTTGACATTATGAATCATGCTTGCCGAGCCTTAACATATA

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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001031659

Insert Size: 5931 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: NM_001031659.1, NP_001026829.1

RefSeq Size: 7300 bp

RefSeq ORF: 6078 bp

Locus ID: 316575

UniProt ID: F1LP64

Cytogenetics: 9q35

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]