

Product datasheet for **MR222771L4V**

Atat1 (NM_001142745) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

| | |
|---------------------------|--|
| Product Type: | Lentiviral Particles |
| Product Name: | Atat1 (NM_001142745) Mouse Tagged ORF Clone Lentiviral Particle |
| Symbol: | Atat1 |
| Synonyms: | 0610011P08Rik; 2610008K08Rik; 2610110G12Rik; 3110080J08Rik; Mec17; TAT |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_001142745 |
| ORF Size: | 999 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(MR222771). |
| 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. |
| RefSeq: | NM_001142745.1 , NP_001136217.1 |
| RefSeq Size: | 2068 bp |
| RefSeq ORF: | 1002 bp |
| Locus ID: | 73242 |
| UniProt ID: | Q8K341 |
| Cytogenetics: | 17 B1 |



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Gene Summary:

Specifically acetylates 'Lys-40' in alpha-tubulin on the lumenal side of microtubules. Promotes microtubule destabilization and accelerates microtubule dynamics; this activity may be independent of acetylation activity. Acetylates alpha-tubulin with a slow enzymatic rate, due to a catalytic site that is not optimized for acetyl transfer. Enters the microtubule through each end and diffuses quickly throughout the lumen of microtubules. Acetylates only long/old microtubules because of its slow acetylation rate since it does not have time to act on dynamically unstable microtubules before the enzyme is released. Required for normal sperm flagellar function. Promotes directional cell locomotion and chemotaxis, through AP2A2-dependent acetylation of alpha-tubulin at clathrin-coated pits that are concentrated at the leading edge of migrating cells. May facilitate primary cilium assembly.[UniProtKB/Swiss-Prot Function]