

## Product datasheet for **MR216207L3V**

### Arhgap44 (NM\_001099288) Mouse Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Arhgap44 (NM_001099288) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Arhgap44
Synonyms:	6330543G20; AI840762; AU040829; AW493732; Rich2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001099288
ORF Size:	2424 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR216207).
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. <a href="#">More info</a>
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:	<a href="#">NM_001099288.1</a> , <a href="#">NP_001092758.1</a>
RefSeq Size:	4047 bp
RefSeq ORF:	2427 bp
Locus ID:	216831
UniProt ID:	<a href="#">Q5SSM3</a>
Cytogenetics:	11 B3



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**Gene Summary:**

GTPase-activating protein (GAP) that stimulates the GTPase activity of Rho-type GTPases. Thereby, controls Rho-type GTPases cycling between their active GTP-bound and inactive GDP-bound states. Acts as a GAP at least for CDC42 and RAC1 (PubMed:24352656, PubMed:26969129). In neurons, is involved in dendritic spine formation and synaptic plasticity in a specific RAC1-GAP activity (PubMed:23739967, PubMed:24352656, PubMed:26969129). Limits the initiation of exploratory dendritic filopodia. Recruited to actin-patches that seed filopodia, binds specifically to plasma membrane sections that are deformed inward by acto-myosin mediated contractile forces. Acts through GAP activity on RAC1 to reduce actin polymerization necessary for filopodia formation (By similarity). In association with SHANK3, promotes GRIA1 exocytosis from recycling endosomes and spine morphological changes associated to long-term potentiation (PubMed:23739967). [UniProtKB/Swiss-Prot Function]