

Product datasheet for **RR208300L4V**

Sox6 (NM_001024751) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Sox6 (NM_001024751) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Sox6
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001024751
ORF Size:	2361 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR208300).
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_001024751.1 , NP_001019922.1
RefSeq Size:	2724 bp
RefSeq ORF:	2364 bp
Locus ID:	293165
UniProt ID:	Q4V8G3
Cytogenetics:	1q35



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Gene Summary:

Transcription factor that plays a key role in several developmental processes, including neurogenesis, chondrocytes differentiation and cartilage formation (By similarity). Specifically binds the 5'-AACAAAT-3' DNA motif present in enhancers and super-enhancers and promotes expression of genes important for chondrogenesis (By similarity). Required for overt chondrogenesis when condensed prechondrocytes differentiate into early stage chondrocytes: SOX5 and SOX6 cooperatively bind with SOX9 on active enhancers and super-enhancers associated with cartilage-specific genes, and thereby potentiate SOX9's ability to transactivate (PubMed:26150426). Not involved in precartilaginous condensation, the first step in chondrogenesis, during which skeletal progenitors differentiate into prechondrocytes (By similarity). Together with SOX5, required to form and maintain a pool of highly proliferating chondroblasts between epiphyses and metaphyses, to form columnar chondroblasts, delay chondrocyte prehypertrophy but promote hypertrophy, and to delay terminal differentiation of chondrocytes on contact with ossification fronts (By similarity). Binds to the proximal promoter region of the myelin protein MPZ gene, and is thereby involved in the differentiation of oligodendroglia in the developing spinal tube (By similarity). Binds to the gene promoter of MBP and acts as a transcriptional repressor (By similarity). [UniProtKB/Swiss-Prot Function]