

## Product datasheet for MR205659

### Lefty1 (NM\_010094) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lefty1 (NM_010094) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lefty1
Synonyms:	Al450052; Eba; Eba1; Left; Leftb; lefty; lefty-; lefty-1; St; Stra3; Tgfb4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205659 representing NM_010094 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGCCATTCTGTGGCTCTGCTGGGCACTCTGGGCACTGTCGCTGGTTAGCCTCAGGGAAGCCCTGACCG  
GAGAGCAGATCCTGGGCAGCCTGCTGCAACAGCTGCAGCTCGATCAACCGCCAGTCTGGACAAGGCTGA  
TGTGGAAGGGATGGTCATCCCCTCGCACGTGAGGACTCAGTATGTGGCCCTGCTACAACACAGCCATGCC  
AGCCGCTCCCAGGCAAGAGGTTCCAGCCAGAACCTTCGAGAGGTGGCAGGAGGTTCTGGTGTGAGAGA  
CCTCCACTCACCTGCTAGTGTTCGGAATGGAGCAGCGGCTGCCGCCTAACAGCGAGCTGGTGCAGGCTGT  
GCTGCGGCTGTTCCAGGAGCCTGTGCCAGAACAGCTCTCCGGAGGCAAAAGAGGCTGTCCCCACACAGT  
GCCCGGGCTCGGGTACCAATTGAATGGCTGCGCTTCCGCGACGACGGCTCCAACCGCACTGCCCTTATCG  
ATTCTAGGCTCGTGTCCATCCACGAGAGCGGCTGGAAGGCCTTCGACGTGACCGAGGCGGTGAACCTCTG  
GCAGCAGCTGAGCCGGCCGAGGCAGCCGCTGCTGCTCCAGGTGTCGGTGCAGAGGGAGCATCTGGGGCCG  
GGAACCTGGAGCTCACACAAGTTGGTTCGTTTCGCGGCGCAGGGGACGCCGGATGGCAAGGGGCAGGGCG  
AGCCACAGCTGGAGCTGCACACGCTGGACCTCAAGGACTATGGAGCTCAAGGCAATTGTGACCCCGAGGC  
ACCAGTGAAGGCACCCGATGCTGTGCCAGGAGATGTACCTGGACCTGCAGGGGATGAAGTGGGCC  
GAGAAGTGGATCCTAGAACCAGGTTCTGACATATGAATGTGGGAGCTGCCTGCAGCTACCCG  
AGTCCCTGACCAGCAGGTGGCCATTTCTGGGGCTCGGCAGTGTGCGCTCAGAGATGACCTCCCTGCC  
CATGATTGTGAGCGTGAAGGAGGAGGCAGGACCAGGCCCAAGTGGTGCAGCTGCCAACATGAGGGTG  
CAGACCTGTAGCTGCGCCTCAGATGGGGCGCTCATACCCAGGAGGCTGCAGCCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



[View online »](#)

**Protein Sequence:** >MR205659 representing NM\_010094  
Red=Cloning site Green=Tags(s)

MPFLWLCWALWALSLSVSLREALTGEQILGSLQLQQLDQPPVLDKADVEGMVIPSHVRTQYVALLQHS  
 SRSRGKRFSQLREVAGRFLVSETSTHLLVFGMEQRLPPNSELVQAVLRLFQEPVPRALRRQRLSPHS  
 ARARVTIEWLRFRRDDGSNRTALIDSRLVSIHESGWKAFDVTEAVNFWQQLSRPRQPLLLQVSVQREHLGP  
 GTWSSHKLVRF AAQGTDPDGKGQGEPLQLHLHTLDLKDYGAGQNCDEAPVTEGTRCCRQEMYLDLQGMKWA  
 ENWILEPPGFLTYECVGSCLQLPESLTSRWPFLGPRQCVASEMTSLPMIVSVKEGGRTRPQVVSPLNMRV  
 QTCSCASD GALIPRRLLQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9005\\_e08.zip](https://cdn.origene.com/chromatograms/mm9005_e08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_010094

**ORF Size:** 1104 bp

**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.

**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\\_010094.4](#)

**RefSeq Size:** 1622 bp

**RefSeq ORF:** 1107 bp

**Locus ID:** 13590

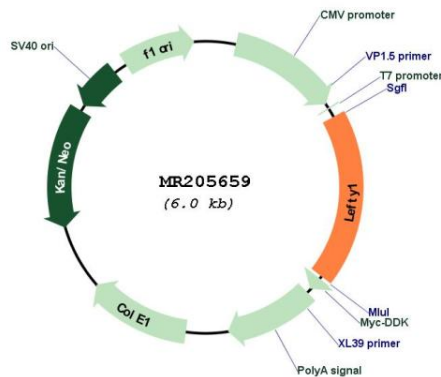
**UniProt ID:** [Q64280](#)

**Cytogenetics:** 1 H4

**MW:** 41.9 kDa

**Gene Summary:** This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate the mature protein, which plays a role in left-right asymmetry determination of organ systems during development. Mice lacking a functional copy of this gene exhibit embryonic lethality and defects in left-right patterning. [provided by RefSeq, Aug 2016]

### Product images:



Circular map for MR205659