

Product datasheet for **MC206083**

Ret (BC059012) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ret (BC059012) Mouse Untagged Clone
Tag: Tag Free
Symbol: Ret
Synonyms: RET9, RET51, PTC
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC059012
GCGAGTATAGGTGACCAGTCGGCCAGACGCCGAATCTTCTGTGTGCTCTTTCTGGGCGCGGGAAAGG
ACTAACAGAAACAGCAAGCGAGACGCACGGGTGAGAAAGTGGCTATGCCGGCAAATGATCATGGATCCA
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CCAGTCCGCTCCCGGGCGCAGGCAGCGCAGGTCTCTCATCAGTACCGCAACCGGAGCCGTGCAAGCAAC
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ACCGCGGCCCTCGCGCGCAGGGCGATGGCGAAAGCGACGTCCGGCGCCGAGGGCTGGGGCTGAAGCTG
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CCCAAGTGAATAAGAGGGCCCGCCGCTATGCCAGATCGGGAAAGTCTGTGTGAAAACTGCCAGGAGTTC
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TTGCCAGGGAAAGCTGGCATCCCCAGCTATGCTATCGTTGCAAGCTGGGCTACCCCGAGGCTGCTCCTGG
GCTGGTGTGTGCCTCGCGGAAGCCGACCATAATCCCCTTCCAGCTATGTGTCCACAGCCGTGCAGTGTG
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CCCCATCATGATGTTGTCACTCACGAAGCCAGTGTAAATACTGAGCCAATGCTTCTGAAAAGAACATAG
TCTGTGGTGTGTGGCCTTGAATGGACAGTAAATACGGCTCTTGCCAAAAGTCTTCTTGTCTTGGAT
TAAATACTTGAAATTTTAAAAAAAAAAAAAAAAAAAAA

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- Restriction Sites:** Ascl-NotI
- ACCN:** BC059012
- Insert Size:** 3222 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: [BC059012](#), [AAH59012](#)

RefSeq Size: 4517 bp

RefSeq ORF: 3222 bp

Locus ID: 19713

Cytogenetics: 6 55.86 cM

Gene Summary: Receptor tyrosine-protein kinase involved in numerous cellular mechanisms including cell proliferation, neuronal navigation, cell migration, and cell differentiation upon binding with glial cell derived neurotrophic factor family ligands. Phosphorylates PTK2/FAK1. Regulates both cell death/survival balance and positional information. Required for the molecular mechanisms orchestration during intestine organogenesis; involved in the development of enteric nervous system and renal organogenesis during embryonic life, and promotes the formation of Peyer's patch-like structures, a major component of the gut-associated lymphoid tissue. Modulates cell adhesion via its cleavage by caspase in sympathetic neurons and mediates cell migration in an integrin (e.g. ITGB1 and ITGB3)-dependent manner. Involved in the development of the neural crest. Active in the absence of ligand, triggering apoptosis through a mechanism that requires receptor intracellular caspase cleavage. Acts as a dependence receptor; in the presence of the ligand GDNF in somatotrophs (within pituitary), promotes survival and down regulates growth hormone (GH) production, but triggers apoptosis in absence of GDNF. Regulates nociceptor survival and size. Triggers the differentiation of rapidly adapting (RA) mechanoreceptors. Mediator of several diseases such as neuroendocrine cancers; these diseases are characterized by aberrant integrins-regulated cell migration. Mediates, through interaction with GDF15-receptor GFRAL, GDF15-induced cell-signaling in the brainstem which induces inhibition of food-intake. Activates MAPK- and AKT-signaling pathways (PubMed:28846099).[UniProtKB/Swiss-Prot Function]