

## **Product datasheet for TL501988**

## OriGene Technologies, Inc.

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## Ccl20 Mouse shRNA Plasmid (Locus ID 20297)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Ccl20 Mouse shRNA Plasmid (Locus ID 20297)

**Locus ID:** 20297

Synonyms: CKb4; exodus-1; LARC; MIP-3A; MIP-3[a]; MIP3A; Scya20; ST38

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Ccl20 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 20297).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC028504, NM 001159738, NM 016960</u>, <u>NM 001159738.1, NM 016960.1, NM 016960.2</u>

UniProt ID: 089093

**Summary:** Acts as a ligand for C-C chemokine receptor CCR6. Signals through binding and activation of

CCR6 and induces a strong chemotactic response and mobilization of intracellular calcium ions (PubMed:9862452, PubMed:20068036). The ligand-receptor pair CCL20-CCR6 is responsible for the chemotaxis of dendritic cells (DC), effector/memory T-cells and B-cells

and plays an important role at skin and mucosal surfaces under homeostatic and

inflammatory conditions, as well as in pathology, including cancer and autoimmune diseases (PubMed:21376174). CCL20 acts as a chemotactic factor that attracts lymphocytes and,

slightly, neutrophils, but not monocytes (By similarity). Involved in the recruitment of both the proinflammatory IL17 producing helper T-cells (Th17) and the regulatory T-cells (Treg) to sites of inflammation (PubMed:19050256). Required for optimal migration of thymic natural regulatory T cells (nTregs) and DN1 early thymocyte progenitor cells (PubMed:24638065). Positively regulates sperm motility and chemotaxis via its binding to CCR6 which triggers

Ca2+ mobilization in the sperm which is important for its motility (PubMed:25122636). May

be involved in formation and function of the mucosal lymphoid tissues by attracting

lymphocytes and dendritic cells towards epithelial cells (PubMed:10064080).

[UniProtKB/Swiss-Prot Function]







shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).