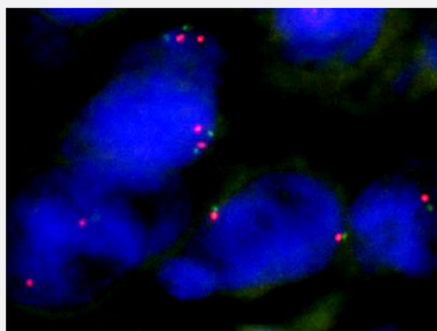


# CXCL1/CEN4q FISH Probe

Catalog # FG0043

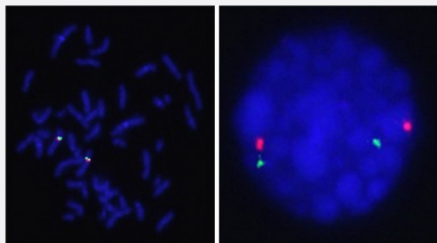
Size 200 uL, 100 uL

## Applications



### Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with CXCL1/CEN4q FISH Probe. Human breast cancer showed no CXCL1 gene amplification



### Hybridization position of the probes on the chromosome.

□

Hybridization position of the probes on the chromosome.

## Specification

### Product Description

Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. ([Technology](#)).

|                                |                                                                                                                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Probe 1</b>                 | <b>Name:</b> CXCL1<br><b>Size:</b> Approximately 350kb<br><b>Fluorophore:</b> Texas Red<br><b>Location:</b> 4q21                                                                                                              |
| <b>Probe 2</b>                 | <b>Name:</b> CEN4q<br><b>Size:</b> Approximately 650kb<br><b>Fluorophore:</b> FITC<br><b>Location:</b> 4q12                                                                                                                   |
| <b>Probe Gap</b>               | The gap between two probes is approximately 16,100 kb                                                                                                                                                                         |
| <b>Origin</b>                  | Human                                                                                                                                                                                                                         |
| <b>Source</b>                  | Genomic DNA                                                                                                                                                                                                                   |
| <b>Reactivity</b>              | Human                                                                                                                                                                                                                         |
| <b>Form</b>                    | Liquid                                                                                                                                                                                                                        |
| <b>Notice</b>                  | We <b>strongly recommend</b> the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: <a href="#">KA2375</a> or <a href="#">KA2691</a> ) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections. |
| <b>Regulation Status</b>       | For research use only (RUO)                                                                                                                                                                                                   |
| <b>Quality Control Testing</b> | Representative images of normal human cell (lymphocyte) stain with the dual color FISH probe. The left image is chromosomes at metaphase, and the right image is an interphase nucleus.                                       |
| <b>Supplied Product</b>        | DAPI Counterstain (1500 ng/mL ) 125 uL for each 100 uL FISH Probe                                                                                                                                                             |
| <b>Storage Instruction</b>     | Store at 4°C in the dark.                                                                                                                                                                                                     |
| <b>Note</b>                    | <p>Hybridization position of the probes on the chromosome.</p> <p>Hybridization position of the probes on the chromosome.</p>                                                                                                 |

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

- Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with CXCL1/CEN4q FISH Probe. Human breast cancer showed no CXCL1 gene amplification

[Protocol Download](#)

## Gene Info — CXCL1

Entrez GeneID [2919](#)

Gene Name CXCL1

Gene Alias FSP, GRO1, GROa, MGSA, MGSA-a, NAP-3, SCYB1

Gene Description chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)

Omim ID [155730](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

Chemokines are a group of small (approximately 8 to 14 kD), mostly basic, structurally related molecules that regulate cell trafficking of various types of leukocytes through interactions with a subset of 7-transmembrane, G protein-coupled receptors. Chemokines also play fundamental roles in the development, homeostasis, and function of the immune system, and they have effects on cells of the central nervous system as well as on endothelial cells involved in angiogenesis or angiostasis. Chemokines are divided into 2 major subfamilies, CXC and CC, based on the arrangement of the first 2 of the 4 conserved cysteine residues; the 2 cysteines are separated by a single amino acid in CXC chemokines and are adjacent in CC chemokines. CXC chemokines are further subdivided into ELR and non-ELR types based on the presence or absence of a glu-leu-arg sequence adjacent and N terminal to the CXC motif. ELR types are chemotactic for neutrophils, while non-ELR types are chemotactic for lymphocytes.[supplied by OMIM]

**Other Designations**

GRO1 oncogene (melanoma growth stimulating activity, alpha)|GRO1 oncogene (melanoma growth-stimulating activity)|MGSA alpha|chemokine (C-X-C motif) ligand 1|fibroblast secretory protein|melanoma growth stimulatory activity alpha

## Pathway

- [Chemokine signaling pathway](#)
- [Cytokine-cytokine receptor interaction](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)

## Disease

- [Alzheimer disease](#)
- [Asthma](#)
- [Bronchiolitis](#)

- [Genetic Predisposition to Disease](#)
- [Infant](#)
- [Ovarian Neoplasms](#)
- [Respiratory Syncytial Virus Infections](#)