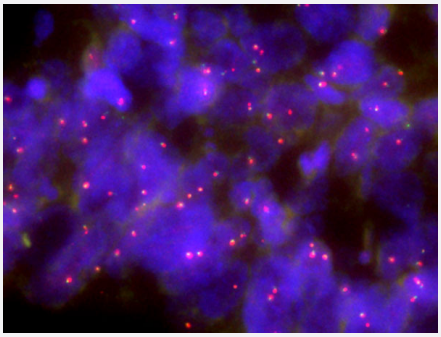
NTRK1 Split FISH Probe

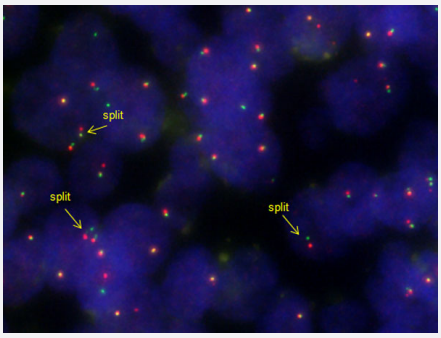
Catalog # FS0024 Size 200 uL, 100 uL

Applications



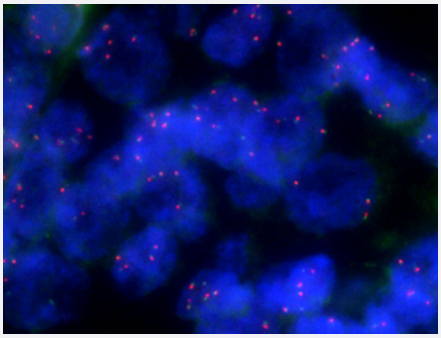
Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human colon cancer (FFPE) stained with TRKA Split FISH Probe. Human colon cancer showed no TRKA gene split.



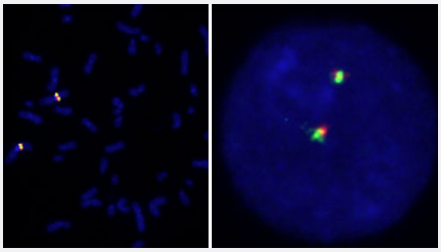
Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human ovary cancer (FFPE) stained with TRKA Split FISH Probe. Human ovary cancer showed TRKA gene split.



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

Human hepatocellular carcinoma (FFPE) stained with TRKA Split FISH Probe. Human hepatocellular carcinoma showed no TRKA gene split.



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 split using Fluorescent In Situ Hybridization Techniqu e. (Technology).
Probe 1	**Name:** NTRK1 **Size:** Approximately 420kb **Fluorophore:** TexRed **Location:** 1q23.1
Probe 2	**Name:** NTRK1 **Size:** Approximately 780kb **Fluorophore:** FITC **Location:** 1q23.1
Probe Gap	The gap between two probes is approximately 40 kb.
Origin	Human
Source	Genomic DNA
Reactivity	Human
Form	Liquid
Notice	We **strongly recommend** the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)

Quality Control Testing	Representative images of normal human cell (lymphocyte) stain with the dual color FISH probe. The l eft image is chromosomes at metaphase, and the right image is an interphase nucleus.
Supplied Product	DAPI Counterstain (1500 ng/mL) 125 uL for each 100 uL FISH Probe
Storage Instruction	Store at 4°C in the dark.
Note	Hybridization position of the probes on the chromosome: Hybridization position of the probes on the chromosome:

Applications

- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

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

  Human colon cancer (FFPE) stained with TRKA Split FISH Probe. Human colon cancer showed no TRKA gene split.

  Protocol Download

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

  Human ovary cancer (FFPE) stained with TRKA Split FISH Probe. Human ovary cancer showed TRKA gene split.

  Protocol Download

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

  Human hepatocellular carcinoma (FFPE) stained with TRKA Split FISH Probe. Human hepatocellular carcinoma showed no TRKA gene split.

  Protocol Download

Gene Info — NTRK1

Entrez GeneID	4914
Gene Name	NTRK1
Gene Alias	DKFZp781I14186, MTC, TRK, TRK1, TRKA, p140-TrkA
Gene Description	neurotrophic tyrosine kinase, receptor, type 1
Omim ID	155240 191315 256800

Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the neurotrophic tyrosine kinase receptor (NTKR) family. This kin ase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and me mbers of the MAPK pathway. The presence of this kinase leads to cell differentiation and may pla y a role in specifying sensory neuron subtypes. Mutations in this gene have been associated with congenital insensitivity to pain, anhidrosis, self-mutilating behavior, mental retardation and cancer. Alternate transcriptional splice variants of this gene have been found, but only three have been ch aracterized to date. [provided by RefSeq
Other Designations	OTTHUMP00000038736|Oncogene TRK|high affinity nerve growth factor receptor|tyrosine kinase receptor A

Publication Reference

- Cytoplasmic TrkA Expression as a Screen for Detecting NTRK1 Fusions in Colorectal Cancer.

  Choi Y, Won YJ, Lee S, Kim A, Kim Y, Park WY, Jo HJ, Song GA, Kwon CH, Park DY.

  Translational Oncology 2018 Jun; 11(3):764.

  Application: FISH-P, Human, Colorectal cancer tissues

- NTRK1 fusions for the therapeutic intervention of Korean patients with colon cancer.

  Do Youn Park, Chan Choi, Eunji Shin, Jae Hyuk Lee, Chae Hwa Kwon1, Hong-Jae Jo, Hyeong-Rok Kim, Hyun Sung Kim, Nahmgun Oh, Ji Shin Lee, Ok Ku Park, Eok Park, Jonghoon Park, Jong-Yeon Shin, Jong-Il Kim, Jeong-Sun Seo, Hee Dong Park and Joonghoon Park.

  Oncotarget 2016 Feb; 7(7):8399.

  Application: FISH-P, Human, Human colon adenocarcinoma

Pathway

- Apoptosis
- Endocytosis
- MAPK signaling pathway
- Neurotrophin signaling pathway
- Pathways in cancer
- Thyroid cancer

Disease

- Alzheimer disease
- Asperger Syndrome
- Autistic Disorder
- Cardiovascular Diseases
- Diabetes Mellitus
- Disease Models
- Eating Disorders
- Edema
- Genetic Predisposition to Disease
- Hereditary Sensory and Autonomic Neuropathies
- Hyperparathyroidism
- Kidney Failure
- Leukemia
- Mental Disorders
- Neuroblastoma
- Social Perception
- Thyroid Diseases
- Thyroid Neoplasms