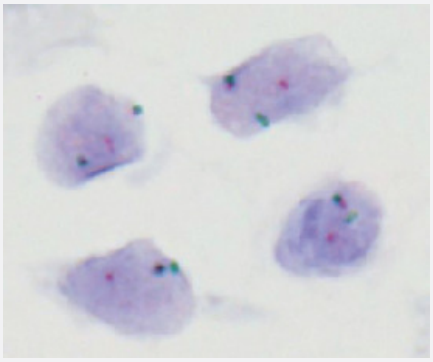
DDIT3 Split CISH Probe

Catalog # CS0005 Size 100 uL

Applications



Chromogenic *In Situ* Hybridization (FFPE Tissue)

Myxoid liposarcoma tissue section with translocation affecting the 12q13.3-q14.1 locus as indicated by one non-rearranged red/green fusion signal, one red signal, and one separate green signal indicating the translocation.

Specification

Product Description	DDIT3 Split CISH Probe is designed for the qualitative detection of translocations involving the human DDIT3 gene at 12q13.3 in formalin-fixed, paraffin-embedded specimens by chromogenic *in situ* hybridization (CISH).
Reactivity	Human
Recommend Usage	The product is ready-to-use. No reconstitution, mixing, or dilution is required. Bring probe to room temperature (18-25°C) and mix briefly before use.
Supplied Products	Reagent Provided: This Probe is available in one size and is composed of: Digoxigenin-labeled polynucleotides, which target sequences mapping in 12q13.3-q14.1* (chr12:58,024,366-58,486,511) distal to the DDIT3 breakpoint region. Dinitrophenyl-labeled polynucleotides, which target sequences mapping in 12q13.3* (chr12:57,386,302-57,865,800) proximal to the DDIT3 breakpoint region. Formamide based hybridization buffer. *according to Human Genome Assembly GRCh37/hg19
Probe Position	

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Regulatory Status	For research use only (RUO)
Storage Instruction	Store at 2-8°C in an upright position. Return to storage conditions immediately after use.
Note	The probe is intended to be used in combination with the CISH Implementation Kit 2 (Catalog #: KA5366), which provides necessary reagents for specimen pretreatment and post-hybridization processing. Interpretation of results: Using the CISH Implementation Kit 2 (Cat # KA5366), hybridization signals of Digoxigenin-labeled polynucleotides appear as dark green colored distinct dots (distal to the DDIT3 breakpoint region), and Dinitrophenyl-labeled polynucleotides appear as bright red colored distinct dots (proximal to the DDIT3 breakpoint region). **Normal situation**: In interphases of normal cells or cells without a translocation involving the DDIT3 gene region, two red/green fusion signals appear. **Aberrant situation**: One DDIT3 gene region affected by a translocation is indicated by one separate distinct dot-shaped green signal and one separate distinct dot-shaped red signal. Overlapping signals may appear as brown signals. Genomic aberrations due to small deletions, duplications or inversions might result in inconspicuous signal patterns. Other signal patterns than those described above may be observed in some abnormal samples. These unexpected signal patterns should be further investigated. The digoxigenin-labeled probe and the formamide-based hybridization buffer are pre-mixed and provided in a single ready-to-use vial. Only one tube is included in the package.
Interpretation of Result	
Self-Attestation	Abnova self-attests to comply with the U.S. Framework for Nucleic Acid Synthesis Screening

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Gene Info — DDIT3

Entrez GeneID	1649
Gene Name	DDIT3
Gene Alias	CEBPZ, CHOP, CHOP10, GADD153, MGC4154
Gene Description	DNA-damage-inducible transcript 3
Omim ID	126337

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Gene Ontology	Hyperlink
Other Designations	C/EBP homologous protein|C/EBP zeta|CCAAT/enhancer-binding protein homologous protein|growth arrest- and DNA damage-inducible

Pathway

- MAPK signaling pathway

Disease

- Alzheimer disease
- Cognition
- Diabetes Mellitus
- Genetic Predisposition to Disease
- Kidney Failure

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