

MET/CEN7 FISH Probe

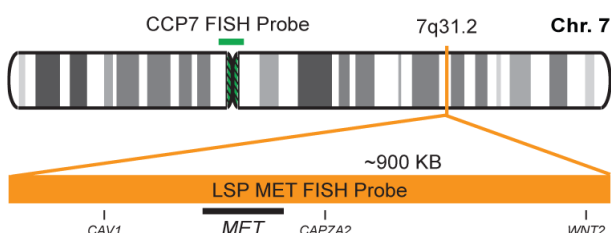
Ref: MAD-009M (10 test)

INTRODUCTION:

The rearrangements and the abnormal expression of the MET gene (also known as HGFR, AUTS9, RCCP2 or c-Met) have been described in hereditary and sporadic renal tumors and other types of tumors. The amplification of the MET gene has been detected in lung, breast, gastrointestinal and prostate carcinomas as well as in gliomas and melanomas, among others. In these tumors, the amplification of the gene is a negative prognostic factor and, in some cases, it is associated with resistance to the treatment.

INTENDED USE:

The MET/CEN7 FISH probe is designed to detect amplifications of the MET human gene located in the band of the chromosome 7q31.2, in relation to the centromere of the Chromosome 7.



PROBE DESCRIPTION:

The MET FISH probe labeled with the CytoOrange fluorochrome covers a chromosome region that includes the whole MET gene. The CEN7 FISH probe labeled with the CytoGreen fluorochrome is derived from the alpha satellite region of the centromere of the chromosome 7 and is designed as a control to determine the number of copies of the chromosome 7 per cell.

	Fluorochrome	Excitation	Emission
CEN7 Probe	CytoGreen	495 nm	518 nm
MET Probe	CytoOrange	551 nm	575 nm

REFERENCE AND PRESENTATION:

MAD-009M – MET/CEN7 FISH PROBE - 10 tests in a ready-to-use format.

WORKING PROTOCOL:

The probe is validated for manual in situ hybridization on paraffin-embedded tissue sections following the instructions recommended in the FISH Pretreatment Kit (ref: MAD-FISH-PTK).

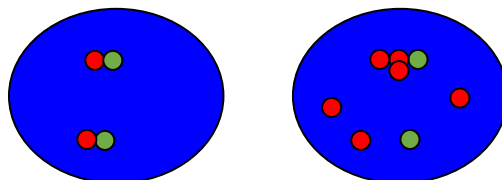
Note: It is recommended to shake the probe with the pipette before use.

The hybridization protocol for this probe is the following:

Denaturation: 80°C, 5 min

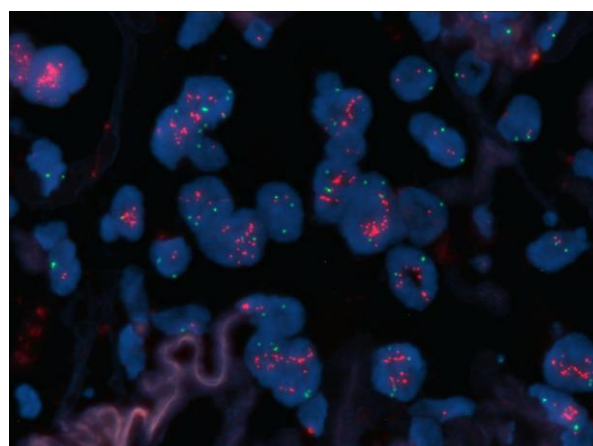
Hybridization: 43°C, 16 hours

INTERPRETATION:



Cell without amplification Cell with amplification of the MET gene

For the interpretation of the results of the fluorescence hybridization, it is recommended to apply the interpretation criteria in force and accepted worldwide.



Lung carcinoma with amplification of the MET gene

WARNINGS AND PRECAUTIONS:

1. Avoid the contact of the reagents with the eyes and the mucous membranes. If the reagents come into contact with sensitive areas, wash them with plenty of water.
2. This product is harmful if swallowed.
3. Check with the local or state authorities about the recommended disposal method.
4. Avoid the microbial contamination of the reagents.

SAFETY RECOMMENDATIONS: The product is only intended for professional laboratory purposes, and it is not intended for pharmacological, home or any other type of use. The current version of the material safety data sheet of this product can be downloaded



by searching its reference at www.vitro.bio or can be requested at regulatory@vitro.bio.

STORAGE: Keep refrigerated between 2 and 8°C until the expiration date of the product. **DO NOT FREEZE THE PRODUCT.**

BIBLIOGRAPHY

- 1: Liu Y. The human hepatocyte growth factor receptor gene: complete structural organization and promoter characterization. *Gene*. 1998 Jul 17;215(1):159-69.
- 2: Di Renzo MF, Olivero M, Martone T, Maffe A, Maggiora P, Stefani AD, Valente G, Giordano S, Cortesina G, Comoglio PM. Somatic mutations of the MET oncogene are selected during metastatic spread of human HNSC carcinomas. *Oncogene*. 2000 Mar 16;19(12):1547-55.
- 3: Oda Y, Sakamoto A, Saito T, Kinukawa N, Iwamoto Y, Tsuneyoshi M. Expression of hepatocyte growth factor (HGF)/scatter factor and its receptor c-MET correlates with poor prognosis in synovial sarcoma. *Hum Pathol*. 2000 Feb;31(2):185-92.
- 4: Wallenius V, Hisaoka M, Helou K, Levan G, Mandahl N, Meis-Kindblom JM, Kindblom LG, Jansson JO. Overexpression of the hepatocyte growth factor (HGF) receptor (Met) and presence of a truncated and activated intracellular HGF receptor fragment in locally aggressive/malignant human musculoskeletal tumors. *Am J Pathol*. 2000 Mar;156(3):821-9.
- 5: Danilkovitch-Miagkova A, Miagkov A, Skeel A, Nakaigawa N, Zbar B, Leonard EJ. Oncogenic mutants of RON and MET receptor tyrosine kinases cause activation of the beta-catenin pathway. *Mol Cell Biol*. 2001 Sep;21(17):5857-68.

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet
	Keep away from sunlight