

MDM2/CEN12 FISH Probe

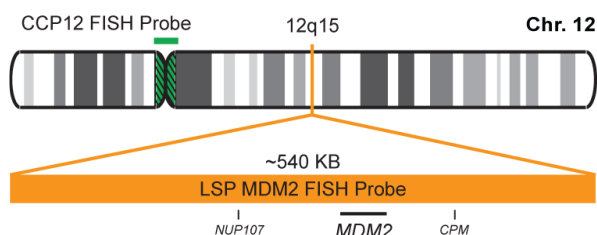
Ref: MAD-010M (10 test)

INTRODUCTION:

An abnormal expression of the MDM2 gene (also known as MDM2, hdm2 or ACTFS) has been described, generally associated by amplification of the same with a 7% of the human neoplastic processes. The neoplasms that more frequently show MDM2 gene amplification are atypical lipomatous tumors/well-differentiated liposarcomas, undifferentiated liposarcomas, intimal sarcomas and low-grade osteosarcomas (parosteal/intramedullary).

INTENDED USE:

The MDM2/CEN12 FISH probe is designed to analyze the MDM2 human gene located in the band of the chromosome 12q15, in relation to the centromere of the Chromosome 12.



PROBE DESCRIPTION:

The MDM2 FISH Probe labeled with the CytoOrange fluorochrome covers a chromosome region that includes the whole MDM2 gene. The CCP12 FISH Probe labeled with the CytoGreen fluorochrome is derived from the alpha satellite region of the centromere of the chromosome 12 and is designed as a control to determine the number of copies per cell of the chromosome 12.

	Fluorochrome	Excitation	Emission
CEN12 Probe	CytoGreen	495 nm	518 nm
MDM2 Probe	CytoOrange	551 nm	575 nm

REFERENCE AND PRESENTATION:

MAD-010FA – MDM2 / CEN12 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).

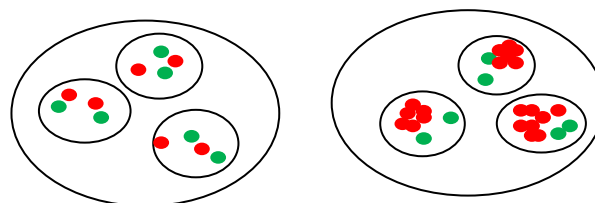
Note: It is recommended to shake the probe with the pipette before use.

The hybridization protocol for this probe is the following:

Denaturation: 80°C, 5 min

Hybridization: 43°C, 16 hours

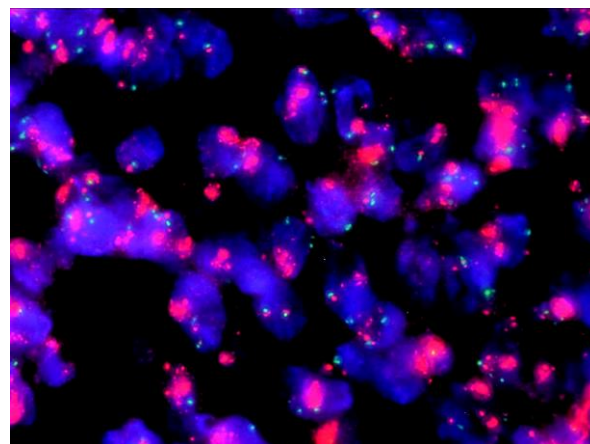
INTERPRETATION:



Cell without amplification MDM2

Cell with MDM2 gene amplification

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



Undifferentiated liposarcoma with MDM2 amplification

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: Oliner JD, Kinzler KW, Meltzer PS, George DL, Vogelstein B. Amplification of a gene encoding a p53-associated protein in human sarcomas. *Nature*. 1992 Jul 2;358(6381):80-3.
- 2: Watanabe T, Ichikawa A, Saito H, Hotta T. Overexpression of the MDM2 oncogene in leukemia and lymphoma. *Leuk Lymphoma*. 1996 May;21(5-6):391-7
- 3: Honda R, Tanaka H, Yasuda H. Oncoprotein MDM2 is a ubiquitin ligase E3 for tumor suppressor p53. *FEBS Lett*. 1997 Dec 22;420(1):25-7.
- 4: Momand J, Jung D, Wilczynski S, Niland J. The MDM2 gene amplification database. *Nucleic Acids Res*. 1998 Aug 1;26(15):3453-9
- 5: Bond GL, Hu W, Bond EE, Robins H, Lutzker SG, Arva NC, Bargonetti J, Bartel F, Taubert H, Wuerl P, Onel K, Yip L, Hwang SJ, Strong LC, Lozano G, Levine AJ. A single nucleotide polymorphism in the MDM2 promoter attenuates the p53 tumor suppressor pathway and accelerates tumor formation in humans. *Cell*. 2004 Nov 24;119(5):591-602.

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