

In situ hybridization

ZytoPure® FISH Probes for sarcomas



ZytoPure® FISH Probes

ZytoMed Systems is proud to offer the new product line **ZytoPure® FISH**, a reliable and accurate tool for the detection of genetic aberrations in FFPE tissue sections, cell samples and metaphase spreads by fluorescence *in situ* hybridization. **ZytoPure® FISH Probes** display brilliant signals, low background, and an excellent signal to noise

ratio. They are intended to be used in combination with the **ZytoPure® FISH Accessory Kit** comprising all reagents necessary for performing a FISH procedure on FFPE sections. The kit contains just 4 reagents and includes a robust and easy to follow protocol. All **ZytoPure® FISH Probes** as well as the **ZytoPure® FISH Accessory Kit** are CE/IVD-labelled.

► Background information: ZytoPure® FISH Probes for sarcomas

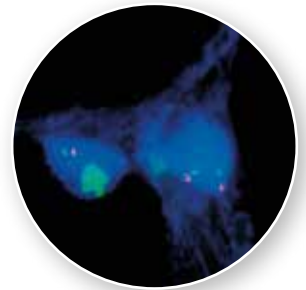
Numerous recurrent genomic rearrangements have been described in a number of bone and soft tissue tumors in the last 15 years [1, 2]. To give just a few examples, rearrangement of the USP6 gene occurs in the majority of primary aneurysmal bone cysts [3], and also in nodular fasciitis [4]. SS18 rearrangement is highly specific for synovial sarcomas [5], and the majority of Ewing sarcomas

is characterized by EWSR1 rearrangements [1]. Amplification of the MDM2 gene typically occurs in liposarcomas (but not lipomas) [6], and in certain osteosarcomas. In combination with histological and radiological findings, FISH-based detection of these rearrangements is a very important tool for the often complex differential diagnosis of these entities.

► Product information

ZytoPure® FISH Probes for sarcomas

Description	Labeling	CE/IVD	Volume	Cat. No.
MDM2/CEP12 ZytoPure® FISH Probe	green/orange	✓	20 µl	F2C006-002
			100 µl	F2C006-010
USP6 Break Apart ZytoPure® FISH Probe	green/orange	✓	20 µl	F2C007-002
			100 µl	F2C007-010
EWSR1 Break Apart ZytoPure® FISH Probe	orange/green	✓	20 µl	F2C008-002
			100 µl	F2C008-010
SS18 Break Apart ZytoPure® FISH Probe	orange/green	✓	20 µl	F2C009-002
			100 µl	F2C009-010
FUS Break Apart ZytoPure® FISH Probe	green/orange	✓	20 µl	F2C010-002
			100 µl	F2C010-010



MDM2/CEP12 ZytoPure® FISH Probe, liposarcoma showing amplification in left nucleus with large green MDM2 cluster; right nucleus displays normal copy number



Human metaphases hybridized with the SS18 Break Apart ZytoPure® FISH Probe.

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Ancillary Reagents

Description	CE/IVD	Volume	Cat. No.
ZytoPure® FISH Accessory Kit (Pepsin Solution, 4 ml; FISH Pretreatment Buffer, 500 ml; 20x FISH Wash Buffer, 2 x 50 ml; DAPI/Antifade Solution, 800 µl)	✓	1 Kit (20 tests)	FA-Kit1-20
Pepsin Solution	✓	4 ml	FA-001-004
FISH Pretreatment Buffer (rtu)	✓	500 ml	FA-002-500
20x FISH Wash Buffer	✓	50 ml	FA-003-050
DAPI/Antifade Solution	✓	800 µl	FA-004-008
Fixogum (Rubber Cement)	-	50 g	ZY-FX50
		125 g	ZY-FX125



Other ZytoPure® FISH Probes

Description	Labeling	CE/IVD	Volume	Cat. No.
ERBB2/CEP17 ZytoPure® FISH Probe	orange/green	✓	20 µl	F2C001-002
			100 µl	F2C001-010
ALK Break Apart ZytoPure® FISH Probe	green/orange	✓	20 µl	F2C002-002
			100 µl	F2C002-010
ROS1 Break Apart ZytoPure® FISH Probe	orange/green	✓	20 µl	F2C003-002
			100 µl	F2C003-010
RET Break Apart ZytoPure® FISH Probe	orange/green	✓	20 µl	F2C004-002
			100 µl	F2C004-010
MET/CEP7 ZytoPure® FISH Probe	green/orange	✓	20 µl	F2C005-002
			100 µl	F2C005-010

ZytoPure® Fluorochromes

Fluorochrome	Excitation	Emission
PureGreen	498 nm	532 nm
PureOrange	550 nm	576 nm

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Literature

- [1] Puls F *et al.* Histopathol 64:461-476, 2014
- [2] Vargas AC *et al.* Asia Pac J Clin Oncol 15:38-47, 2019
- [3] Oliveira AM *et al.* Am J Pathol 165:1773-1780, 2004
- [4] Erickson-Johnson MR *et al.* Lab Invest 91:1427-1433, 2011
- [5] Tanas MR *et al.* Arch Pathol Lab Med 134:1797-1803, 2010
- [6] Ware PL *et al.* Am J Clin Pathol 141:334-341, 2014