

## SOLID TUMOR FISH

### ▶ PROBES Centromere Enumeration

1p36 deletion  
1p36 / 1q25  
6p25.3 / 6 centromere  
11q23 deletion  
12p13 / 12 centromere  
17p13 / 17q21 / 17 centromere  
ALK [2p23]  
CDK4 [12q13.14]  
CDKN2A (P16) [9p21]  
COL1A1 [17q21]  
COL1A1::PDGFB [t(17;22)]  
DDIT3 (CHOP) [12q13]  
EGFR [7p11.2-p12]  
ERBB2 (HER2/neu) [17q11.2-q12]  
ETV6 (TEL) [12p13]  
EWSR1 [22q12]  
EWSR1::ATF1 [t(12;22)]  
EWSR1::CREB1 [t(2;22)]  
EWSR1::WT1 [t(11;22)]  
FOXO1 [13q14]  
FUS [16p11.2]  
FUS::CREB3L2 [t(7;16)]  
HER2/neu (ERBB2) [17q11.2-q12]  
HMGA2 [12q14.3]  
MDM2 [12q15]  
MYC [8q24] / 8 centromere  
MYCN [2p24.1]  
NR4A3 [9q22.33]  
NUTM1 [15q14]  
NUTM1::BRD4 [t(15;19)]  
PAX3 [2q36]  
PDGFB [22q13]  
PLAG1 [8q12.1]  
PTEN [10q23]  
RB1 [13q14]  
RET [10q11]  
ROS1 [6q22]  
SMARCB1 (INI1) [22q11.23]  
SS18 (SYT) [18q11.2 / t(X;18)]  
TFE3 [Xp11]  
USP6 [17p13]

### ▶ INDICATION-SPECIFIC TESTING and PANELS

- **Alveolar Rhabdomyosarcoma (ARMS)**  
FOXO1 [13q14]  
PAX3 [2q36]
- **Alveolar Soft Part Sarcoma (ASPS)**  
TFE3 [Xp11]
- **Aneurysmal Bone Cyst (ABC)**  
USP6 [17p13]
- **Angiomatoid Fibrous Histiocytoma (AFH)**  
EWSR1 [22q12]  
EWSR1::ATF1 [t(12;22)]  
EWSR1::CREB1 [t(2;22)]  
FUS [16p11.2]
- **Bladder Cancer (UroVysion®)**  
3 centromere  
7 centromere  
17 centromere  
CDKN2A (P16) [9p21]
- **Clear Cell Sarcoma of Soft Tissue (CCS) / Malignant Melanoma of Soft Parts**  
EWSR1 [22q12]  
EWSR1::ATF1 [t(12;22)]  
EWSR1::CREB1 [t(2;22)]
- **Dermatofibrosarcoma Protuberans (DFSP)**  
COL1A1::PDGFB [t(17;22)]
- **Desmoplastic Small Round Cell Tumor (DSRCT)**  
EWSR1::WT1 [t(11;22)]
- **Ewing Sarcoma (ES) / Primitive Neuroectodermal Tumor (PNET)**  
EWSR1 [22q12]  
FUS [16p11.2]
- **Extraskelatal Myxoid Chondrosarcoma (EMC)**  
EWSR1 [22q12]  
NR4A3 [9q22.33]
- **HER2/neu (ERBB2) [17q11.2-q12]**  
Breast Cancer  
Gastroesophageal  
Non-breast/Non-gastroesophageal  
Cancer
- **Infantile Fibrosarcoma (IFS)**  
ETV6 (TEL) [12p13]
- **Inflammatory Myofibroblastic Tumor (IMT)**  
ALK [2p23]
- **Lipoblastoma**  
PLAG1 [8q12.1]
- **Lipoma**  
HMGA2 [12q14.3]
- **Liposarcoma (WDLS/ALT; DDLS)**  
CDK4 [12q13.14]  
MDM2 [12q15]
- **Low Grade Fibromyxoid Sarcoma (LGFMS)**  
EWSR1 [22q12]  
FUS [16p11.2]  
FUS::CREB3L2 [t(7;16)]
- **Mammary Analogue Secretory Carcinoma (MASC)**  
ETV6 (TEL) [12p13]
- **Medulloblastoma (MBD)**  
6p25.3 / 6 centromere  
17p13 / 17q21 / 17 centromere  
MYC [8q24] / 8 centromere  
MYCN [2p24.1]
- **Midline Carcinoma**  
NUTM1 [15q14]  
NUTM1::BRD4 [t(15;19)]
- **Myxoid Liposarcoma (MLS)**  
DDIT3 (CHOP) [12q13]  
EWSR1 [22q12]  
FUS [16p11.2]
- **Neuroblastoma (NB)**  
1p36 deletion  
11q23 deletion  
MYCN [2p24.1]
- **Neurological Cancer**  
1p36 / 1q25  
19q13 / 19p13  
CDKN2A (P16) [9p21]  
EGFR [7p11.2-p12]  
PTEN [10q23]
- **Nodular Faciitis**  
USP6 [17p13]
- **Non-Small Cell Lung Cancer (NSCLC)**  
ALK [2p23]  
RET [10q11]  
ROS1 [6q22]
- **Renal Cell Carcinoma (RCC)**  
TFE3 [Xp11]
- **Rhabdoid Tumor (AT/RT; MRT)**  
SMARCB1 (INI1) [22q11.23]
- **Synovial Sarcoma (SS)**  
SS18 (SYT) [18q11.2 / t(X;18)]