

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 / 2B [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)]
USP6 [17p13]

▶ INDICATION-SPECIFIC TESTING and PANELS

- **Alveolar Rhabdomyosarcoma (ARMS)**
FOXO1 [13q14]
PAX3 [2q36]
- **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]
- **Rhabdoid Tumor (AT/RT; MRT)**
SMARCB1 (INI1) [22q11.23]
- **Synovial Sarcoma (SS)**
SS18 (SYT) [18q11.2 / t(X;18)]