USEFUL FOR

Identifying MYCN amplification, MYC amplification, and monosomy of chromosome 6 (detected using MYB probe), to aid in the classification of medulloblastoma patients into specific clinical categories.

CLINICAL INFORMATION

Medulloblastoma is the most common malignant brain tumor in children. Current treatment decisions are based on clinical variables. Biomarkers have been identified that allow classification of medulloblastoma into subtypes that are associated with a specific clinical behavior. FISH analyses for the MYCN, MYB, and MYC loci may be useful in medulloblastoma patients to help provide prognostic information and guide treatment.

INTERPRETATION

MYCN:

- The MYCN locus is reported as amplified when the MYCN:D2Z1 ratio is 2.0 or greater and demonstrates 8 or more copies of the MYCN locus.
- A tumor with a MYCN:D2Z1 ratio < 2.0 or demonstrating a ratio of 2.0 or greater with < 8 copies of MYCN, is considered to lack amplification of the MYCN locus.

MYB:

- Monosomy of chromosome 6 is reported when the percent of cells with the abnormality exceeds the normal cutoff for the probe set.

MYC:

- The MYC locus is reported as amplified when the MYC:D8Z2 ratio is 2.0 or greater and demonstrates 8 or more copies of the MYC locus.
- A tumor with a MYC:D8Z2 ratio < 2.0 or demonstrating a ratio of 2.0 or greater with < 8 copies of MYC, is considered to lack amplification of the MYC locus.

REFERENCE VALUES

An interpretive report will be provided.

ANALYTIC TIME

7 days
**REFLEX TESTS**

<table>
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<tr>
<th>TEST ID</th>
<th>REPORTING NAME</th>
<th>AVAILABLE SEPARATELY</th>
<th>ALWAYS PERFORMED</th>
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<tr>
<td>_PB1</td>
<td>Probe Set, 1st</td>
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<td>No</td>
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<tr>
<td>_PBCT</td>
<td>Probe, +2</td>
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<td>_PADD</td>
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<td>_PB02</td>
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<td>Interphases, ≥ 100</td>
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</table>

**SPECIMEN REQUIRED**

Provide a pathology report with each specimen. The laboratory will not reject a specimen that arrives without this information but will hold the specimen until a pathology report is received.

Submit only 1 of the following tissue specimens:

**PREFERRED**
- Tissue block

**ACCEPTABLE**
- Slides

**CLINICAL REFERENCE**


