

## **IDH 1/2 QL Mutation Detection**

### **CERNER ORDERABLE**

Using IU Health Pathology requisition; Order through CoPath please call 317.491.6417

### **CPT CODE**

81403x2

### **CLINICAL UTILITY**

IDH1/2 mutations are highly frequent in certain glioma subtypes. IDH mutations have been shown to be associated with better patient outcomes. IDH may also be a therapeutic target in IDH mutant gliomas. Based on these findings, IDH1 mutation status is becoming part of the standard diagnostic assessment of these tumors<sup>1</sup>

### **METHODOLOGY**

Real Time PCR utilizing Scorpions® and ARMS® (Allele Refractory Mutation System) technologies

### **SPECIMENS**

Preferable primary tumor

- FFPE tissue (Formalin fixative only)
  - For tissue resection: 1 H&E and 8 unstained slides
  - For a biopsy: 1 section on 1 slide for H&E plus 6 unstained slides with 3 sections per slide

### **SPECIMEN STABILITY and SHIPPING**

- Transport/Storage of slides at room temperature.

### **CAUSES FOR REJECTION**

Excess necrosis for slides. Inadequate percentage tumor; poor DNA quality.

### **SPECIFICITY**

The IDH1/2 RGQ PCR Kit provides reagents to perform 9 separate amplification reactions for detection of 12 mutations:

3 total amplification reactions of codons 132 and 100 of the IDH1 gene and of codon 172 of the IDH2 gene

3 mutation amplification reactions of codons 132 and 100 of the IDH1 gene and of codon 172 of the IDH2 gene

3 mutation-specific amplification reactions of IDH1 R132H, IDH1 R132C, and IDH2 R172K mutations

### **ASSAY RANGE**

- IDH 1/2 mutation not detected.
- IDH 1/2 mutation detected. Results will specify which IDH 1/2 mutation was found.

**TURNAROUND TIME** 7-10 Working days

1. Reference information can be found in the Indiana University Health Molecular Assay Procedures.