HB HoopBio

EasyDigital IDH2

QuanStudio™ Absolute Q™ Digital PCR System



IDH2 gene (Isocitrate dehydrogenase NADP+ (2)) encodes for an enzyme that catalyzes the oxidative decarboxylation of isocitrate to 2-oxoglutarate. One of the primary roles of IDHs is the conversion of isocitrate, a key intermediate in the citric acid cycle to produce alpha-ketoglutarate (α -KG) to produce NADPH. This protein may tightly associate or interact with the pyruvate dehydrogenase complex.

IDH2 mutations have been observed in a number of cancer types, including sarcomas, hematologic malignancies, colon cancer and brain cancer. For the proper function of multiple dioxygenases involved in metabolic and epigenetic regulation, the presence of sufficient cellular levels of α -KG is essential (Ho et al., 2010, Marcucci et al., 2010, Pietrak et al., 2011, Tefferi et al., 2010). In up to 20% of patients with acute myeloid leukemia (AML), somatic mutations in IDH1 and IDH2 are observed (Cairns et al., 2012, Choi et al., 2012, Parsons et al., 2008, Thol et al., 2010).

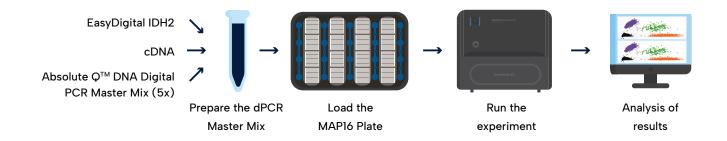
The **EasyDigital IDH2** enables the detection of several missense mutations located in locus 15q26.1 with high sensitivity and specificity. The EasyDigital IDH2 has been designed to be used in the QuantStudio™



Absolute Q^{TM} Digital PCR System. The assay includes oligonucleotides and fluorescent probes for the amplification of three SNPs variants (NM_001289910.1, NM_001290114.1 and NM_002168.3).

The **EasyDigital IDH2** has been validated for the QuantStudio[™] Absolute Q[™] Digital PCR System. Digital PCR (dPCR) is a precise technique that allows absolute nucleic acid quantification of low amounts of targets.

- dPCR system: QuantStudio[™]
 Absolute Q[™] Digital PCR System
- Number of reactions: 48
- 4-16 samples per dPCR run (MAP16 Plate)
- The assay includes oligonucleotides and fluorescent probes for the amplification of three SNPs variants of the missense mutations in IDH2.
- Software easy to use
- Results in copies/µl





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