Background: Enolase is an important glycolytic enzyme involved in the interconversion of 2-phosphoglycerate to phosphoenolpyruvate. Mammalian enolase exists as three subunits: enolase-1 (α-enolase), enolase-2 (γ-enolase) and enolase-3 (β-enolase) that can form both homo- and heterodimers. Expression of the enolase isoforms differs in a tissue specific manner (1). Enolase-1 plays a key role in anaerobic metabolism under hypoxic conditions and may act as a cell surface plasminogen receptor during tissue invasion (2,3). Abnormal expression of enolase-1 is associated with tumor progression in some cases of breast and lung cancer (4-7). Alternatively, an enolase-1 splice variant (MBP-1) binds the c-myc promoter p2 and may function as a tumor suppressor. For this reason enolase-1 is considered as a potential therapeutic target in the treatment of some forms of cancer (8).

Specificity/Sensitivity: Enolase-1 Antibody detects endogenous levels of total enolase-1 protein and does not cross-react with enolase-2.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human enolase-1. Antibodies are purified by protein A and peptide affinity chromatography.

Background References: