Anti-IDH1 Polyclonal Antibody

Cat: K110332P

Summary:

【**Product name**】: Anti-IDH1 antibody

【**Source**】: Rabbit

【**Isotype**】: IgG

【**Species reactivity**】: Human Mouse Rat

【**Swiss Prot**】: O75874

【**Gene ID**】: 3417

【**Calculated**】: MW:47kDa

【**Purification**】: Affinity purification

【**Tested applications**】: IHC

【**Recommended dilution**】: IHC 1:50-200.

【**IHC Positive sample**】: Human ovarian cancer

【**Subcellular location**】: Cytoplasm Nucleus

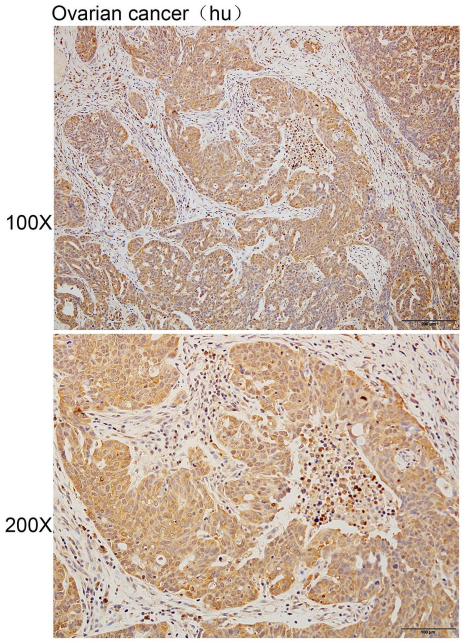
【**Immunogen**】: A synthetic peptide of IDH1

【**Storage**】: Shipped at 4°C. Upon delivery aliquot and store at -20°C

Background:

Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for this gene.

Verified picture



Immunohistochemistry of paraffin-embedded Human ovarian cancer using IDH1 antibody diluted at 1:100