

Glycolysis Antibody Sampler Kit

Cat# AK0162

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Glycolysis is the metabolic process by which glucose is converted to pyruvate in a sequence of enzymatic steps. Hexokinase catalyzes the conversion of glucose to glucose-6-phosphate, the first step in glycolysis. Hexokinases I, II, and III are associated with the outer mitochondrial membrane and are critical for maintaining an elevated rate of aerobic glycolysis in cancer cells (Warburg effect). Phosphofructokinase (PFK) catalyzes the phosphorylation of fructose-6-phosphate. Platelet-type phosphofructokinase (PFKP) is expressed in various cell types. Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate. Pyruvate kinase, a glycolytic enzyme, catalyses the conversion of phosphoenolpyruvate to pyruvate. In mammals, the M1 isoform (PKM1) is expressed in most adult tissues. The M2 isoform (PKM2), an alternatively-spliced variant of M1, is expressed during embryonic development. Lactate dehydrogenase (LDH) catalyzes the interconversion of pyruvate and NADH to lactate and NAD⁺. LDHA expression is induced when the oxygen supply is too low for mitochondrial ATP production. The pyruvate dehydrogenase complex catalyzes the conversion of pyruvate and CoA into acetyl-CoA and CO₂ in the presence of NAD⁺. The reaction of oxidative decarboxylation of pyruvate serves as a critical link between glycolysis and the citric acid cycle and lipid metabolism.

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340645	PKM Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse, Rat	Rabbit
A340172	GAPDH Polyclonal Antibody	20μL	WB, IHC	Human, Mouse, Rat, Monkey, Chicken, Rabbit, Sheep, Xenopus	Rabbit
A340629	PDHA1 Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit

A340557	HK1 Polyclonal Antibody	20μL	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340141	HK2 Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340633	PFKP Polyclonal Antibody	20μL	WB, IHC, IF, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.