

Glycolysis II Antibody Sampler Kit



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

1 Kit (7 x 20 microliters)

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Aldolase A (D73H4) Rabbit mAb	8060	20 µl	40 kDa	Rabbit IgG
Enolase-1 Antibody	3810	20 µl	47 kDa	Rabbit
Enolase-2 Antibody	9536	20 µl	47 kDa	Rabbit
PDHK1 (C47H1) Rabbit mAb	3820	20 µl	47 kDa	Rabbit IgG
PFKFB2 (D7G5R) Rabbit mAb	13045	20 µl	55 kDa	Rabbit IgG
PFKFB3 (D7H4Q) Rabbit mAb	13123	20 µl	60 kDa	Rabbit IgG
PGAM1 (D3J9T) Rabbit mAb	12098	20 µl	28 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Glycolysis II Antibody Sampler Kit provides an economical means to investigate select enzymes involved in glycolysis. The kit contains enough primary antibody to perform two western blot experiments per primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Background

Glycolysis is the metabolic process by which glucose is converted to pyruvate in a sequence of enzymatic steps. Phosphofructokinase (PFK) catalyzes the phosphorylation of fructose-6-phosphate in glycolysis (1). The bifunctional 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (PFK-2/FBPase or PFKFB) catalyzes the synthesis and degradation of fructose 2,6-bisphosphate and regulates its steady-state level. Four different PFKFB isoforms (PFKFB1, PFKFB2, PFKFB3, and PFKFB4) have been identified (2). Aldolase (fructose bisphosphate aldolase) is a glycolytic enzyme that catalyzes the conversion of fructose 1, 6-bisphosphate to 3-phosphoglyceraldehyde (3). Phosphoglycerate mutase (PGAM1) catalyzes the conversion of 3-phosphoglycerate to 2-phosphoglycerate during glycolysis (4). 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 (5). Pyruvate dehydrogenase kinase (PDHK) phosphorylates PDH and inactivates it, whereas dephosphorylation of PDH is carried out by pyruvate dehydrogenase phosphatase to generate the active form (6).

Background References

1. Mediavilla, D. et al. (2008) *J Biochem* 144, 235-44.
2. Atsumi, T. et al. (2005) *Diabetes* 54, 3349-57.
3. Castaldo, G. et al. (2000) *Clin Chem* 46, 901-6.
4. Vander Heiden, M.G. et al. (2010) *Science* 329, 1492-9.
5. Pancholi, V. (2001) *Cell Mol Life Sci* 58, 902-20.
6. Wigfield, S.M. et al. (2008) *Br J Cancer* 98, 1975-84.

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