

# Glycolysis II Antibody Sampler Kit



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

Support: 877-678-TECH (8324)

Web: info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

1 Kit (7 x 20 microliters)

**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](http://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.

## Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

## Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.