Revision 1

Store at -20C

#12704

Acetyl-CoA Carboxylase 1 and 2 Antibody Sampler Kit

1 Kit (4 x 20 microliters)

Cell Signaling TECHNOLOGY®

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

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

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-Acetyl-CoA Carboxylase (Ser79) (D7D11) Rabbit mAb	11818	20 µl	280 kDa	Rabbit IgG
Acetyl-CoA Carboxylase (C83B10) Rabbit mAb	3676	20 µl	280 kDa	Rabbit IgG
Acetyl-CoA Carboxylase 1 Antibody	4190	20 µl	265 kDa	Rabbit
Acetyl-CoA Carboxylase 2 (D5B9) Rabbit mAb	8578	20 µl	280 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 Acetyl-CoA Carboxylase 1 and 2 Antibody Sampler Kit provides an economical means of distinguishing between the two acetyl-CoA carboxylase isoforms, and between total acetyl-CoA carboxylase and phosphorylated acetyl-CoA carboxylase. The kit includes enough 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

Acetyl-CoA carboxylase (ACC) catalyzes the carboxylation of acetyl-CoA to malonyl-CoA (1). It is the key enzyme in the biosynthesis and oxidation of fatty acids (1). In rodents, the 265 kDa ACC1 (ACCα) form is primarily expressed in lipogenic tissues, while 280 kDa ACC2 (ACCβ) is the main isoform in oxidative tissues (1,2). However, in humans, ACC2 is the predominant isoform in both lipogenic and oxidative tissues (1,2). Phosphorylation by AMPK at Ser79 or by PKA at Ser1200 inhibits the enzymatic activity of ACC (3). ACC is a potential target of anti-obesity drugs (4,5).

Background References

1. Castle, J.C. et al. (2009) *PLoS One* 4, e4369.
2. Kreuz, S. et al. (2009) *Diabetes Metab Res Rev* 25, 577-86.
3. Ha, J. et al. (1994) *J Biol Chem* 269, 22162-8.
4. Abu-Elheiga, L. et al. (2001) *Science* 291, 2613-6.
5. Levert, K.L. et al. (2002) *J Biol Chem* 277, 16347-50.

Trademarks and Patents

Limited Uses

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.