



#8334 Store at -20C

Lipolysis Activation Antibody Sampler Kit

1 Kit (5 x 20 microliters)

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Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-HSL (Ser563) Antibody	4139	20 µl	81, 83 kDa	Rabbit
Phospho-HSL (Ser565) Antibody	4137	20 µl	81, 83 kDa	Rabbit
Perilipin-1 (D1D8) XP [®] Rabbit mAb	9349	20 µl	62 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat
HSL (D6W5S) XP [®] Rabbit mAb	18381	20 µl	81, 83 kDa	Rabbit IgG
Phospho-HSL (Ser660) Antibody	45804	20 µl	81, 83 kDa	Rabbit

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

Description

The Lipolysis Activation Antibody Sampler Kit provides an economical means to evaluate the activation status of multiple members of the lipolysis pathway, including phosphorylated HSL and perilipin. The kit includes enough antibody to perform two western mini-blot experiments with each 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

Triacylglycerol is stored in lipid droplets as a primary energy reserve. During lipolysis, triacylglycerols in adipocytes are hydrolyzed into free fatty acids and glycerol. Perilipin, localized at the periphery of lipid droplets, serves as a protective coating against lipases (1-3). Evidence suggests that PKA regulates lipolysis by phosphorylating perilipin and hormone-sensitive lipase (HSL) (1,2,4,5). Phosphorylation of perilipin results in the conformational change that exposes lipid droplets to endogenous lipases, such as HSL (2). Phosphorylation of HSL at Ser563, Ser659, and Ser660 by PKA stimulates HSL activity, which in turn catalyzes the hydrolysis of triacylglycerol (6,7).

Background References

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- Degerman, E. et al. (1990) *Proc Natl Acad Sci U S A* 87, 533-7.
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