

Store at  
-20C  
#18381**HSL (D6W5S) XP<sup>®</sup> Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-IC	H M	Endogenous	81, 83	Rabbit IgG	#Q05469	3991

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:100  
1:200

**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.

**Specificity/Sensitivity**

HSL (D6W5S) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total HSL protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His946 of human HSL protein.

**Background**

HSL (hormone-sensitive lipase) catalyzes the hydrolysis of triacylglycerol, the rate-limiting step in lipolysis. Lipolytic stimuli activate adenylyl cyclase and thus increase intracellular cAMP levels, which in turn activate protein kinase A (PKA). PKA phosphorylates HSL at Ser563, Ser659, and Ser660, which stimulates HSL activity (1,2). In contrast, AMPK phosphorylates HSL at Ser565, which reduces HSL phosphorylation at Ser563 by PKA and inhibits HSL activity (2,3). Recent work indicates that phosphorylation at Ser600 by p44/42 MAPKs also enhances the enzymatic activity of HSL (4).

**Background References**

1. Degerman, E. et al. (1990) *Proc. Natl. Acad. Sci. USA* 87, 533-37.
2. Anthonen, M.W. et al. (1998) *J. Biol. Chem.* 273, 215-21.
3. Garton, A.J. and Yeaman, S.J. (1990) *Eur. J. Biochem.* 191, 245-50.
4. Greenberg, A.S. et al. (2001) *J. Biol. Chem.* 276, 45456-61.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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