Revision 1

Store at -20C

#12574

DAG Lipase β (D4P7C) Rabbit mAb

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.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	70	Rabbit IgG	#Q8NCG7	221955

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

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

DAG Lipase β (D4P7C) Rabbit mAb recognizes endogenous levels of total DAG Lipase β protein. In some tissues, this antibody may detect a 48 kDa protein of unknown origin.

Species predicted to react based on 100% sequence homology

Monkey

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu505 of human DAG Lipase β protein.

Background

Diacylglycerol (DAG) lipases comprise two enzymes called DAG lipase α and β, which are the products of two related genes (1). DAG lipases are transmembrane proteins composed of a short amino-terminal intracellular domain, four transmembrane domains, and a large carboxy-terminal cytoplasmic domain containing the active site. These enzymes are responsible for the biosynthesis of 2-acylglycerol from diacylglycerol in a calcium-dependent manner (1). One of the major endocannabinoid ligands that activate cannabinoid receptors, 2-arachidonyl glycerol (2-AG), is produced by DAG lipases (2). Research studies suggest that DAG lipase α is the isoform primarily responsible for the central production of 2-AG (3). DAG lipase β has been implicated in studies of 2-AG production at the periphery in specific cell types and pathophysiological contexts, such as in hepatic stellate cells during alcohol induced fatty liver (4).

Background References

1. Bisogno, T. et al. (2003) *J Cell Biol* 163, 463-8.
2. Mechoulam, R. et al. (1995) *Biochem Pharmacol* 50, 83-90.
3. Yoshino, H. et al. (2011) *J Physiol* 589, 4857-84.
4. Jeong, W.I. et al. (2008) *Cell Metab* 7, 227-35.

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

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Limited Uses

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.