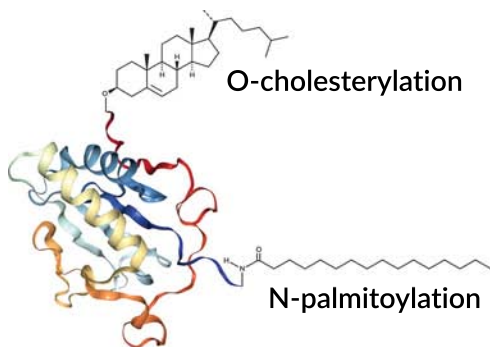
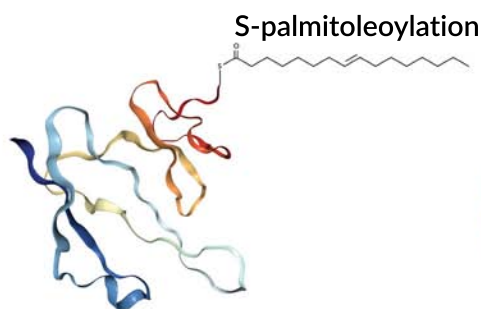


# Protein Lipidation

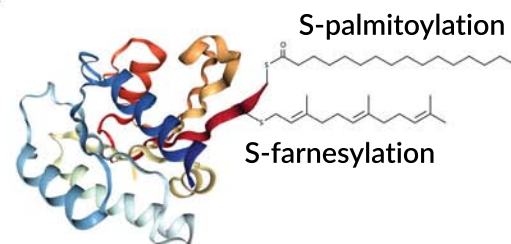
Cayman carries a unique collection of click chemistry probes, substrates, small molecule inhibitors, and antibodies to study the lipidation of proteins. This product line focuses on the covalent modification of proteins *via* fatty acid acylation (e.g., myristoylation or palmitoylation) or prenylation.



Shh



Wnt



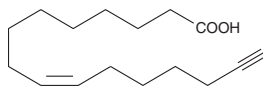
H-Ras

Many proteins are targets for lipid modifications. Sonic hedgehog (Shh) is modified by cholesterylation before undergoing N-palmitoylation. Wnt can be modified by S-palmitoleoylation or O-acylation. The Ras superfamily of GTPases undergoes farnesylation, geranylgeranylation, and S-palmitoylation.

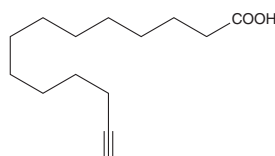
## Click Chemistry Probes

Fatty acids modified with either an azide or an ω-terminal alkyne for use in tagging lipidated proteins by simple chemical linking reactions

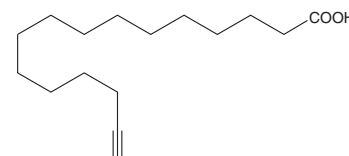
- Label or pull down proteins directly involved in the lipidation process
- Uses the specificity of azide-alkyne bioconjugation reactions for highly reliable readouts
- ≥95% purity



Palmitoleic Acid Alkyne  
Item No. 25362



Myristic Acid Alkyne  
Item No. 13267



Palmitic Acid Alkyne  
Item No. 13266

## Additional Probes

13038	Alkynyl-biotin	13265	4-hydroxy Nonenal Alkyne
13040	Biotin-azide	15968	Palmitoyl Alkyne-Coenzyme A (trifluoroacetate salt)
13269	Farnesyl Alcohol Azide	13581	Phosphine-biotin

## PORCN Inhibitors

Item No.	Product Name
13951	IWP-2
13952	IWP-2-V2
13953	IWP-3
13954	IWP-4
15243	IWP-L6
14072	LGK974
16644	Wnt-C59

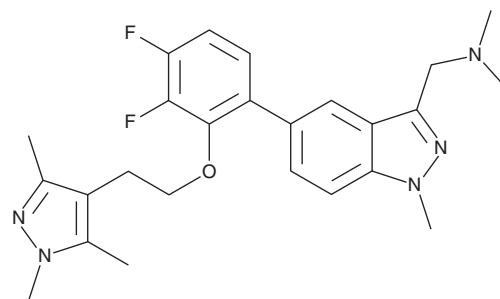
## Acyltransferase Antibodies

Item No.	Product Name
15648	HHATL Polyclonal Antibody
14698	MBOAT1 Polyclonal Antibody
15646	MBOAT2 (C-Term) Polyclonal Antibody
15647	MBOAT2 (Internal) Polyclonal Antibody
18614	MBOAT4 Polyclonal Antibody
14699	MBOAT5 Polyclonal Antibody
14702	PORCN Polyclonal Antibody

## NEWLY DISCOVERED! Inhibitor Targeting Viral Replication in Host Cells

### IMP-1088 - Item No. 25366

- Reduces viral titers in HeLa cells infected with rhinovirus, the virus that most often causes the common cold, without effecting cell growth
- Dually inhibits N-myristoyltransferases NMT1 and NMT2, inhibiting myristoylation of rhinovirus VP0 capsid protein and viral capsid assembly



### Depalmitoylase Inhibitors

Item No.	Product Name	Activity
17630	ML-211	Dual inhibitor of LYPLA1 (IC <sub>50</sub> = 17 nM) and LYPLA2 (IC <sub>50</sub> = 30 nM)
18523	ML-348	Reversible, selective LYPLA1 inhibitor (IC <sub>50</sub> = 210 nM)
20923	ML-349	Reversible, selective LYPLA2 inhibitor (IC <sub>50</sub> = 230 nM)

### Farnesyltransferase and Geranylgeranyltransferase Inhibitors

Item No.	Product Name	Activity
63260	S-Farnesyl Thioacetic Acid	Inhibits isoprenylated protein methyltransferase
22755	FTase Inhibitor I	Selectively inhibits FTase over GGTase (IC <sub>50</sub> s = 21 and 790 nM, respectively), preventing farnesylation of Ras
22756	GGTI 286 (trifluoroacetate salt)	Selectively inhibits geranylgeranylation of Rap1A over farnesylation of H-Ras in NIH3T3 cells (IC <sub>50</sub> s = 2 and > 30 μM respectively)
16176	GGTI 298 (trifluoroacetate salt)	Inhibits GGTase I with little effect on other prenylation enzymes such as FTase
23418	GGTI 2133	Selectively inhibits GGTase I over FTase (IC <sub>50</sub> s = 38 and 5,400 nM, respectively)
11746	Lonafarnib	Inhibits FTase, blocking the farnesylation of H-Ras, N-Ras, and K-Ras (IC <sub>50</sub> s = 1.9, 2.8, and 5.2 nM, respectively) as well as Rheb (IC <sub>50</sub> = 10-100 nM)
11747	Tipifarnib	Inhibits FTase (IC <sub>50</sub> = 0.86 nM); nonpeptidomimetic, CAAX-competitive
17452	Zaragozic Acid A	Inhibits FTase and GGTase I (IC <sub>50</sub> s = 216 and 50 nM, respectively)
14984	Zoledronic Acid (hydrate)	Inhibits the prenylation of GTPases

View additional FTase and GGTase inhibitors at [www.caymanchem.com](http://www.caymanchem.com)

### Isoprenylcysteine Carboxyl Methyltransferase Inhibitors

Item No.	Product Name	Activity
14744	CAY10677	Inhibits Lcmt (IC <sub>50</sub> = 0.86 μM); improved solubility and cell permeability over cysmethynil
14745	Cysmethynil	Inhibits Lcmt (IC <sub>50</sub> = <200 nM)

### Precursor, Donor, and Substrate to Farnesylation or Geranylgeranylation

Item No.	Product Name	Activity
63180	DMAPP (ammonium salt)	Precursor to farnesyl pyrophosphate biosynthesis
63250	Farnesyl Pyrophosphate (ammonium salt)	A donor in post-translational isoprenylation of proteins
63330	Geranylgeranyl Pyrophosphate (ammonium salt)	A substrate in the prenylation of small GTPases



To view a complete list of our protein lipidation products, visit us online at [www.caymanchem.com](http://www.caymanchem.com)

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In Italy: Vinci-Biochem Srl  
 Contatto diretto: tel. 0571 568 147  
 vb@vincibiochem.it  
 www.vincibiochem.it