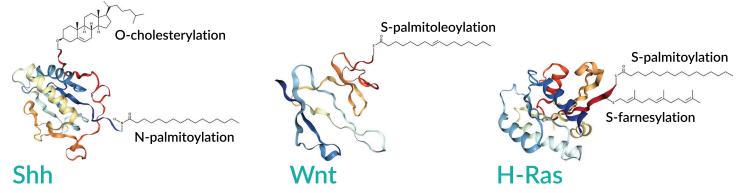
# **Protein Lipidation**

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.



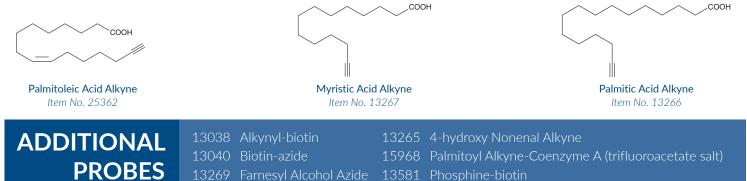


Many proteins are targets for lipid modifications. Sonic hedgehog (Shh) is modified by cholesterylation before undergoing N-palmitoylation. Wht can be modified by S-palmitoleoylation or O-acylation. The Ras superfamily of GTPases undergoes farnesylation, geranylgeranylation, and S-palmitoylation.

# **Click Chemistry Probes**

Fatty acids modified with either an azide or an  $\omega$ -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



#### **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**

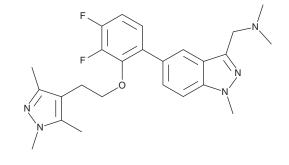
Item No.	Product Name	
15648	HHATL Polyclonal Antibody	
14698	MBOAT1 Polyclonal Antibody	
15646	MBOAT2 (C-Term) Polyclonal Antibody	
15647	MBOAT2 (Internal) Polyclonal Antibody	
18614	MBOAT4 Polyclonal Antibody	
14699	MBOAT5 Polyclonal Antibody	
14702	PORCN Polyclonal Antibody	

# 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 $_{\rm 50}$ = 17 nM) and LYPLA2 (IC $_{\rm 50}$ = 30 nM)
18523	ML-348	Reversible, selective LYPLA1 inhibitor (IC $_{50}$ = 210 nM)
20923	ML-349	Reversible, selective LYPLA2 inhibitor (IC $_{50}$ = 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 $_{50}$ 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 $\mu$ M 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 $_{\rm 50}$ s = 38 and 5,400 nM, respectively)
11746	Lonafarnib	Inhibits FTase, blocking the farnesylation of H-Ras, N-Ras, and K-Ras ( $IC_{50}s = 1.9, 2.8$ , and 5.2 nM, respectively) as well as Rheb ( $IC_{50} = 10-100$ nM)
11747	Tipifarnib	Inhibits FTase (IC $_{50}$ = 0.86 nM); nonpeptidomimetic, CAAX-competitive
17452	Zaragozic Acid A	Inhibits FTase and GGTase I (IC $_{\rm 50}$ 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

## Isoprenylcysteine Carboxyl Methyltransferase Inhibitors

Item No.	Product Name	Activity
14744	CAY10677	Inhibits Icmt (IC $_{\rm 50}$ = 0.86 $\mu M$ ); improved solubility and cell permeability over cysmethynil
14745	Cysmethynil	Inhibits Icmt (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