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(54) Title: MODIFIED MAMMALIAN CELLS

FIGURE 1

Enzymes	Protein Name	Gene Symbol	Found in which product		
Lipases	Lipoprotein lipase	<i>Lpl</i>	X	X	X
	Phospholipase B-domain containing 2	<i>Plbd2</i>	X	X	
	Lipase A	<i>Lipa</i>	X	X	X
	Phospholipase A-2-activating protein	<i>Plaα</i>	X		
	Phospholipase D family member 3	<i>Pld3</i>	X	X	
	Phospholipase A2 group XV	<i>Pla2g15</i>	X	X	
	Phospholipase C beta 1	<i>Plcb1</i>		X	
	Phospholipase C delta 1	<i>Plcd1</i>		X	
	DDHD domain containing protein 1	<i>Ddhd1</i>		X	
	Lysophospholipase-like protein 1	<i>Lyp1al1</i>		X	
	Phospholipase A2 group X1A	<i>Pla2g12a</i>	X		
	Peroxisomal protein 6	<i>Prdx6</i>			X
	Lysophospholipase 1	<i>Lyp1a1</i>	X		
	Phospholipase A1 member A	<i>Pla1a</i>	X		
	Sphingomyelin phosphodiesterase 1	<i>Smpd1</i>	X	X	
Esterases	Palmitoyl-protein thioesterase 1	<i>Ppt1</i>	X	X	X
	Isoamyl acetate hydrolyzing esterase 1 (putative)	<i>Iah1</i>	X	X	
	OTU deubiquitinase, ubiquitin aldehyde binding 1	<i>Otu1</i>	X	X	
	Lysophospholipase 2 (Acyl-protein thioesterase 2)	<i>Lyp1a2</i>	X	X	
	Acyl-coA thioesterase 13	<i>Acot13</i>		X	
	Fatty acid synthase	<i>Fasn</i>			X
	Carboxylesterase 1f/Liver carboxylesterase B-1-like	<i>Ces1f/Ces-b1l</i>	X		
	Carboxylesterase 1	<i>Ces1</i>	X		
	Sialic acid acetyltransferase	<i>Siae</i>	X		
	Phospholipase A2 group VII	<i>Pla2g7</i>			X
Hydrolases	Ubiquitin specific peptidase 5	<i>Usp5</i>			X
	N-acylsphingosine amidohydrolase 1 (Acid ceramidase)	<i>Asah1</i>			X
	Acylcamitine hydrolase	<i>Hach</i>	X		

(57) Abstract: The present disclosure relates to methods, cells, and compositions for producing a product of interest, e.g., a recombinant protein. In particular, the present disclosure provides improved mammalian cells expressing the product of interest, where the cells (e.g., Chinese Hamster Ovary (CHO) cells) have reduced or eliminated activity, e.g., expression, of certain host cell proteins, e.g., enzymes including, but not limited to, certain lipases, esterases, and/or hydrolases.

[Continued on next page]

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