

## **Supporting Information**

# **Evaluation of alkyne-modified isoprenoids as chemical reporters of protein prenylation**

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## Summary of peptide information from Scaffold program used for identification of the 7 proteins labeled using compound 6a.

gi|5729850|ref|NP\_006487.1|(100%),40,533.5 Da  
 guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 3 [Homo sapiens]  
 3 unique peptides, 3 unique spectra, 14 total spectra, 24/354 amino acids (7% coverage)

M G C T L S A E D K	A A V E R S K M I D	R N L R E D G E K A	A K E V K L L L L G	A G E S G K S T I V
K Q M K I I H E D G	Y S E D E C K Q Y K	V V V Y S N T I Q S	I I A I I R A M G R	L K I D F G E A A R
A D D A R Q L F V L	A G S A E E G V M T	P E L A G V I K R L	W R D G G V Q A C F	S R S R E Y Q L N D
S A S Y Y L N D L D	R I S Q S N Y I P T	Q Q D V L R T R V K	T T G I V E T H F T	F K D L Y F K M F D
V G G Q R S E R K K	W I H C F E G V T A	I I F C V A L S D Y	D L V L A E D E E M	N R M H E S M K L F
D S I C N N K W F T	E T S I I L F L N K	K D L F E E K I K R	S P L T I C Y P E Y	T G S N T Y E E A A
A Y I Q C Q F E D L	N R R K D T K E I Y	T H F T C A T D T K	N V Q F V F D A V T	D V I I K N N L K E
C G L Y				

gi|5031877|ref|NP\_005564.1|(100%),66,409.6 Da  
 lam in B1 [Homo sapiens]  
 10 unique peptides, 10 unique spectra, 20 total spectra, 113/586 amino acids (19% coverage)

M A T A T P V P P R	M G S R A G G P T T	P L S P T R L S R L	Q E K E E L R E L N	D R L A V Y I D K V
R S L E T E N S A L	Q L Q V T E R E E V	R G R E L T G L K A	L Y E T E L A D A R	R A L D D T A R E R
A K L Q I E L G K C	K A E H D Q L L L N	Y A K K E S D L N G	A Q I K L R E Y E A	A L N S K D A A L A
T A L G D K K S L E	G D L E D L K D Q I	A Q L E A S L A A A	K K Q L A D E T L L	K V D L E N R C Q S
L T E D L E F R K S	M Y E E E I N E T R	R K H E T R L V E V	D S G R Q I E Y E Y	K L A Q A L H E M R
E Q H D A Q V R L Y	K E E L E Q T Y H A	K L E N A R L S S E	M N T S T V N S A R	E E L M E S R M R I
E S L S S Q L S N L	Q K E S R A C L E R	I Q E L E D L L A K	E K D N S R R M L T	D K E R E M A E I R
D Q M Q Q Q L N D Y	E Q L L D V K L A L	D M E I S A Y R K L	L E G E E E R L K L	S P S P S S R V T V
S R A S S S R S V R	T T R G K R K R V D	V E E S E A S S S V	S I S H S A S A T G	N V C I E E I D V D
G K F I R L K N T S	E Q D Q P M G G W E	M I R K I G D T S V	S Y K Y T S R Y V L	K A G Q T V T I W A
A N A G V T A S P P	T D L I W K N Q N S	W G T G E D V K V I	L K N S Q G E E V A	Q R S T V F K T T I
P E E E E E E E E A	A G V V V E E E L F	H Q Q G T P R A S N	R S C A I M	

gi|13569962|ref|NP\_112243.1|(100%),22,172.0 Da  
 RAB1B, member RAS oncogene family [Homo sapiens]  
 8 unique peptides, 11 unique spectra, 50 total spectra, 76/201 amino acids (38% coverage)

M N P E Y D Y L F K	L L L I G D S G V G	K S C L L L R F A D	D T Y T E S Y I S T	I G V D F K I R T I
E L D G K T I K L Q	I W D T A G Q E R F	R T I T S S Y Y R G	A H G I I V V Y D V	T D Q E S Y A N V K
Q W L Q E I D R Y A	S E N V N K L L V G	N K S D L T T K K V	V D N T T A K E F A	D S L G I P F L E T
S A K N A T N V E Q	A F M T M A A E I K	K R M G P G A A S G	G E R P N L K I D S	T P V K P A G G G C
C				

gi|4506365|ref|NP\_002856.1|(100%),23,546.2 Da  
 RAB2A, member RAS oncogene family [Homo sapiens]  
 3 unique peptides, 4 unique spectra, 14 total spectra, 34/212 amino acids (16% coverage)

M A Y A Y L F K Y I	I I G D T G V G K S	C L L L Q F T D K R	F Q P V H D L T I G	V E F G A R M I T I
D G K Q I K L Q I W	D T A G Q E S F R S	I T R S Y Y R G A A	G A L L V Y D I T R	R D T F N H L T T W
L E D A R Q H S N S	N M V I M L I G N K	S D L E S R R E V K	K E E G E A F A R E	H G L I F M E T S A
K T A S N V E E A F	I N T A K E I Y E K	I Q E G V F D I N N	E A N G I K I G P Q	H A A T N A T H A G
N Q G G Q Q A G G G	C C			

gi|38679888|ref|NP\_942599.1|(100%),23,593.3 Da

RAB6A, member RAS oncogene family isoform b [Homo sapiens]

4 unique peptides, 4 unique spectra, 9 total spectra, 49/208 amino acids (24% coverage)

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M S T G G D F G N P L R K F K L V F L G E Q S V G K T S L I T R F M Y D S F D N T Y Q A T I G I D F
L S K T M Y L E D R T V R L Q L W D T A G Q E R F R S L I P S Y I R D S T V A V V V Y D I T N V N S
F Q Q T T K W I D D V R T E R G S D V I I M L V G N K T D L A D K R Q V S I E E G E R K A K E L N V
M F I E T S A K A G Y N V K Q L F R R V A A A L P G M E S T Q D R S R E D M I D I K L E K P Q E Q P
V S E G G C S C
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gi|34147513|ref|NP\_004628.4|(100%),23,490.0 Da

RAB7, member RAS oncogene family [Homo sapiens]

3 unique peptides, 3 unique spectra, 11 total spectra, 32/207 amino acids (15% coverage)

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M T S R K K V L L K V I I L G D S G V G K T S L M N Q Y V N K K F S N Q Y K A T I G A D F L T K E V
M V D D R L V T M Q I W D T A G Q E R F Q S L G V A F Y R G A D C C V L V F D V T A P N T F K T L D
S W R D E F L I Q A S P R D P E N F P F V V L G N K I D L E N R Q V A T K R A Q A W C Y S K N N I P
Y F E T S A K E A I N V E Q A F Q T I A R N A L K Q E T E V E L Y N E F P E P I K L D K N D R A K A
S A E S C S C
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gi|4826643|ref|NP\_005130.1|(100%),36,377.4 Da

annexin A3 [Homo sapiens]

6 unique peptides, 6 unique spectra, 10 total spectra, 60/323 amino acids (19% coverage)

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M A S I W V G H R G T V R D Y P D F S P S V D A E A I Q K A I R G I G T D E K M L I S I L T E R S N
A Q R Q L I V K E Y Q A A Y G K E L K D D L K G D L S G H F E H L M V A L V T P P A V F D A K Q L K
K S M K G A G T N E D A L I E I L T T R T S R Q M K D I S Q A Y Y T V Y K K S L G D D I S S E T S G
D F R K A L L T L A D G R R D E S L K V D E H L A K Q D A Q I L Y K A G E N R W G T D E D K F T E I
L C L R S F P Q L K L T F D E Y R N I S Q K D I V D S I K G E L S G H F E D L L L A I V N C V R N T
P A F L A E R L H R A L K G I G T D E F T L N R I M V S R S E I D L L D I R T E F K K H Y G Y S L Y
S A I K S D T S G D Y E I T L L K I C G G D D
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