

• - References

Reference #	PMID	Paper title	Authors	Year
Ref. 1	24211138	Tracking brain palmitoylation change: predominance of glial change in a mouse model of Huntington's disease.	Wan J et al.	2013
Ref. 2	24059268	Dual lipidation of the brain-specific Cdc42 isoform regulates its functional properties.	Wirth A et al.	2013
Ref. 3	23358418	Identification of a novel prenyl and palmitoyl modification at the CaaX motif of Cdc42 that regulates RhoGDI binding.	Nishimura A et al.	2013
Ref. 4	25371237	Chemoproteomics reveals Toll-like receptor fatty acylation.	Chesarino NM et al.	2014
Ref. 5	27365300	Palmitoylation of cdc42 Promotes Spine Stabilization and Rescues Spine Density Deficit in a Mouse Model of 22q11.2 Deletion Syndrome.	Moutin E et al.	2016

• - Studies

Study #	Reference	Organism	Cell type	Subcellular location	Technique(s)	Palmitome study?
Study 1	Wan J et al., 2013	Mus musculus	Brain	Total cell lysate	ABE (Acyl-Biotin Exchange)	Yes
Study 2	Wirth A et al., 2013	To be annotated	To be annotated	To be annotated	To be annotated	No
Study 3	Nishimura A et al., 2013	To be annotated	To be annotated	To be annotated	To be annotated	No
Study 4	Chesarino NM et al., 2014	Mus musculus	DC2.4	Total cell lysate	Labeling of substrate with 17-ODYA (17-octadecynoic acid)	Yes
Study 5	Moutin E et al., 2016	Mus musculus	Hippocampal neuron	Total cell lysate	Cleavage of thioester bonds with NH ₂ OH, Acyl RAC, Point mutation of palmitoyltransferase, Depletion of palmitoyltransferase with shRNA	No

• - Palmitoylation hits and sites

Hit ID	Study #	Reference	Hit list	Isoform #	Sites (ID, position, characterisation techniques)
SPalmH:10040	Study 2	-	-	Isoform 1	SPalmS:350 , Cys ¹⁸⁸ SPalmS:351 , Cys ¹⁸⁹
SPalmH:10390	Study 3	-	-	Isoform 1	SPalmS:482 , Cys ¹⁸⁹
SPalmH:21060	Study 5	-	-	-	None
SPalmH:7516	Study 1	List	-	-	None
SPalmH:11889	Study 4	List	-	-	None

• - Cysteine summary and predictions

Pos in alignment	6	18	81	105	157	188	189
Topology	U	U	U	U	U	U	U
Disulfide							
SS prediction	E	E	E	C	E	E	
SS UniProt	NA	H	NA	NA	NA	NA	
Isoform 1	Cys⁶ 15.999	Cys ¹⁸ 6.606	Cys ⁸¹ 1.472	Cys ¹⁰⁵ 9.699	Cys ¹⁵⁷ 0.413	Cys¹⁸⁸ 10.739	Cys¹⁸⁹ 18.059

Isoform 2
[Main isoform]

Cys⁶
15.999
-1.0231613

Cys¹⁸
6.606
0.0

Cys⁸¹
1.472
0.0

Cys¹⁰⁵
9.699
0.0

Cys¹⁵⁷
0.429
0.0

Cys¹⁸⁸
13.553
0.0

Legend:

Topology	<table><tr><td>U</td><td>Undefined</td></tr><tr><td>E</td><td>Extracellular/Lumenal</td></tr><tr><td>T</td><td>Transmembrane</td></tr><tr><td>C</td><td>Cytosolic/Nuclear</td></tr></table>	U	Undefined	E	Extracellular/Lumenal	T	Transmembrane	C	Cytosolic/Nuclear
U	Undefined								
E	Extracellular/Lumenal								
T	Transmembrane								
C	Cytosolic/Nuclear								
Prediction scores	<p>From top to bottom: Cysteine position, CSS-Palm 4.0 score, PalmPred score Color code for cysteine position: Predicted (high confidence prediction with CSS-Palm or/and PalmPred) / Predicted but not validated (in terms of disulfide bond and cellular location) / Not predicted Color code for CSS-Palm 4.0: High confidence, Medium confidence, Low confidence, Not predicted. Color code for PalmPred: High confidence (score > 0.4), Medium confidence (0.1 > score > 0.4), Low confidence (score < 0.1), Not predicted.</p>								