

# Phospholipase C $\delta$ 1 suppresses cell migration and invasion of breast cancer cells by modulating KIF3A-mediated ERK1/2/ $\beta$ -catenin/MMP7 signalling

## SUPPLEMENTARY MATERIALS

### SUPPLEMENTARY FIGURE AND TABLE

#### BioGRID<sup>3.4</sup>

**PLCD1** *Homo sapiens*

NDNC3, PLC-III

phospholipase C, delta 1

**UBI**

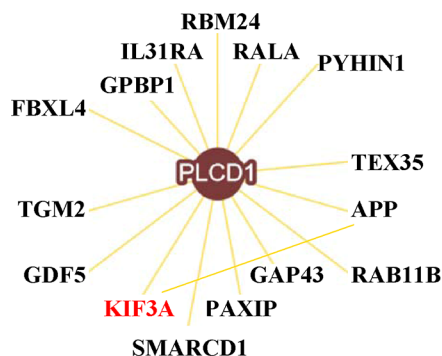
GO Process (3)      GO Function (1)      GO Component (3)

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EXTERNAL DATABASE LINKOUTS

[VEGA](#) | [OMIM](#) | [HGNC](#) | [Entrez Gene](#) | [RefSeq](#) | [UniprotKB](#) | [Ensembl](#) | [HPRD](#)

[Download 12 Published Interactions For This Protein](#)



**KIF3A** | FLA10, KLP-20 1 [\[details\]](#)

kinesin family member 3A

**UBI**

Experimental Evidence Code	Role	Dataset	Throughput	Curated By	Notes
Affinity Capture-MS	BAIT	<a href="#">Huttlin EL (2014/pre-pub)</a>	High	BioGRID	

**The BioPlex Network of Human Protein Interactions: Additional Unpublished AP-MS Results (Pre-Publication)**  
 Huttlin EL, Ting L, Bruckner RJ, Paulo JA, Gygi MP, Rad R, Kolippakkam D, Szpyt J, Zarraga G, Tam S, Gebreab F, Colby G, Pontano-Vaites L, Obar RA, Guarani-Pereira V, Harris T, Artavanis-Tsakonas S, Sowa ME, Harper JW, Gygi SP  
**39061 Associations**      **Status:** Pre-Publication Dataset  
 Pre-Publication data is **NOT** included in BioGRID downloads. It'll be available for download on publication.

**Additional Notes**  
 Quantitative scores are a modified CompPASS score derived from Sowa et al., Cell, 2009 (PMID 19615732). The cut-off threshold is > 0.75.  
**Quantitative Score**  
 0.961

**Supplementary Figure 1: PLCD1 interacts with KIF3A.** Potential PLCD1-interacting partners were analyzed using BioGRID3.4 (<https://thebiogrid.org>). A total of 15 potential interactors were identified, and kinesin family member 3A (KIF3A) was identified in the Huttlin EL dataset (The BioPlex Network of Human Protein Interactions: Additional unpublished AP-MS results, pre-publication) with a quantitative score of 0.961.

Supplementary Table 1: PCR primers sequences and reaction conditions

PCR	Primers	Sequence (5'-3')	Size (bp)	T <sub>A</sub> (°C)	cycle
RT-PCR	<i>PLCD1</i> F	TGTCGCTACTCAAGTGAGTC	197	55	32
	<i>PLCD1</i> R	AGTCCTCCTGCAACTTGTAG			
	<i>β-actin</i> F	TCCTGTGGCATCCACGAAACT	315	55	23
	<i>β-actin</i> R	GAAGCATTTGCGGTGGACGAT			
Real-time PCR	<i>PLCD1</i> F	TGTCGCTACTCAAGTGAGTC	197	60	40
	<i>PLCD1</i> R	AGTCCTCCTGCAACTTGTAG			
	<i>KIF3A</i> F	CTGATATCAGTGGGTCAGAGGA	262	60	40
	<i>KIF3A</i> R	TCCAGCAAAGACTGATGCTCT			
	<i>β-actin</i> F	TCCTGTGGCATCCACGAAACT	315	60	40
	<i>β-actin</i> R	GAAGCATTTGCGGTGGACGAT			

T<sub>A</sub>, Annealing Temperature