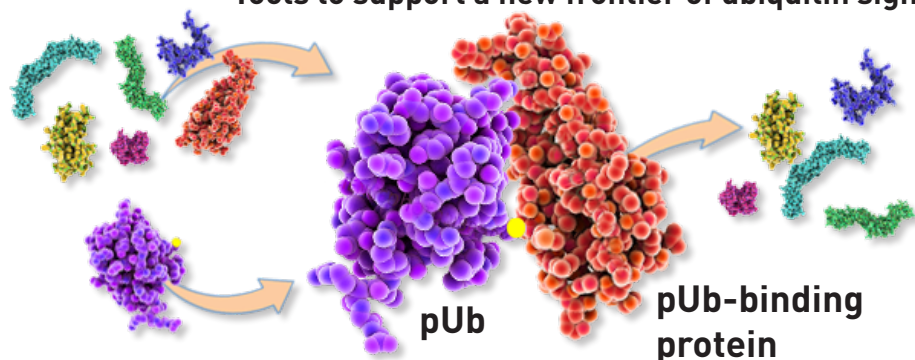


# Phospho-Ubiquitins

Tools to support a new frontier of ubiquitin signalling research



Several variants of phosphorylated ubiquitin – with as yet undefined functions – have been reported in the literature. Phosphoproteomic studies have identified the presence of phosphorylated peptides demonstrating homology to proteins of the Ubiquitin Proteasome Pathway (UPP) including ubiquitin, ubiquitin like modifiers and proteins containing ubiquitin binding domains (Bennetzen *et al.*, 2010; Bian *et al.*, 2014; Moritz *et al.*, 2010; Sharma *et al.*, 2014).

Recent data has shown that the optimal activation of Parkin is regulated by a dual mechanism requiring both phosphorylation of its Ubl domain at Ser65 and the binding to Parkin of ubiquitin phosphorylated at Ser65. Critically Ser65 phosphorylation of both Parkin and ubiquitin is regulated by the kinase PINK1 (Kane *et al.*, 2014; Kazlauskaitė *et al.*, 2014; Koyano *et al.*, 2014).

Ubiquigent is pleased to announce that in collaboration with UbiQ Bio BV and the MRC Protein Phosphorylation and Ubiquitylation Unit (University of Dundee, UK), these new phosphorylated variants of ubiquitin have been added to our extensive portfolio of reagents and are now available to enable and support this new frontier of research sitting at the interface of ubiquitylation and phosphorylation signalling.

The reagents listed below offer the opportunity to further investigate the role and function of Ubiquitin (pSer65) as well as explore and uncover the potential cellular functions of additional phosphorylated variants of ubiquitin reported in the literature.

## Phospho-Ubiquitins

Description	Cat. #	Size	Price
Ubiquitin (synthetic)*	<a href="#">60-0200-050</a>	50 µg	£67 €80
Ubiquitin (pSer57)	<a href="#">60-0208-050</a>	50 µg	£150 €180
Ubiquitin (pSer65)	<a href="#">60-0202-050</a>	50 µg	£150 €180
Biotin-Ahx-Ubiquitin (synthetic)*	<a href="#">60-0201-050</a>	50 µg	£83 €100
Biotin-Ahx-Ubiquitin (pThr7)	<a href="#">60-0203-050</a>	50 µg	£183 €220
Biotin-Ahx-Ubiquitin (pThr12)	<a href="#">60-0204-050</a>	50 µg	£183 €220
Biotin-Ahx-Ubiquitin (pSer57)	<a href="#">60-0205-050</a>	50 µg	£183 €220
Biotin-Ahx-Ubiquitin (pTyr59)	<a href="#">60-0206-050</a>	50 µg	£183 €220
Biotin-Ahx-Ubiquitin (pSer65)	<a href="#">60-0207-050</a>	50 µg	£183 €220

\*All phospho-ubiquitins have been synthetically generated so it is recommended to use these control reagents in experiments as appropriate.

### References:

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Kazlauskaitė A, Kondapalli C, Gourlay R, Campbell DG, Ritorto MS, Hofmann K et al. [2014] Parkin is activated by PINK1-dependent phosphorylation of ubiquitin at Ser65. *Biochem J* 460, 127-139.

Koyano F, Okatsu K, Kosako H, Tamura Y, Go E, Kimura M et al. [2014] Ubiquitin is phosphorylated by PINK1 to activate parkin. *Nature* 510, 162-166.

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Sharma K, D'Souza RC, Tyanova S, Schaab C, Wisniewski JR, Cox J, et al. [2014] Ultra-deep human phosphoproteome reveals a distinct regulatory nature of Tyr and Ser/Thr-based signaling. *Cell Rep* 8, 1583-1594.



## UbiQ

Phosphorylated ubiquitin and derivatives are offered by Ubiquigent under an exclusive license from UbiQ Bio BV, Amsterdam, the Netherlands.

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