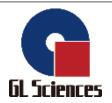


## Isolation of phosphorylated peptide



# Titansphere™ Series

For more information: https://www.funakoshi.co.jp/exports\_contents/81463

### Effective Purification and Concentration of Phosphorylated Peptide!



**Protein** 

**Peptide** 

Phosphorylated peptide

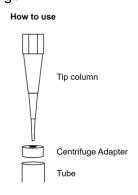
**Analysis** 

The study of reversible phosphorylation plays an important role to reveal various mechanisms such as apoptosis, cell cycle and so on. However, some cases show that the detection of phosphorylated peptide is difficult to detect by mass spectrometry due to its low ionization efficiency and low amount. To solve these issue, Titansphere<sup>™</sup> series has developed. Titania dioxide in Titansphere<sup>™</sup> series absorbs phosphorylated peptide specifically. By using Titansphere<sup>™</sup> series, highly purified and concentrated phosphorylated peptide can be obtained.

#### **Titansphere** Phos-TiO Kit (Tip Type)

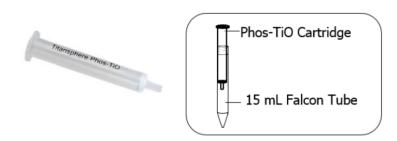
Easy purification and concentration of phosphorylated peptide by centrifuge.





## Titansphere<sup>™</sup> Phos-TiO for Large Volume Samples (Cartridge type)

Cartridge type is also available for larger volume samples compared to tip type. Easy purification and concentration of phosphorylated peptide by centrifuge.



#### **Features**

- -Highly purified and concentrated phosphorylated peptide can be obtained.
- -All steps are done easily by centrifugation and this eliminates human error.
- -Only 40 minute to complete all steps.
- -Column packings are porous particle with spherical shape and have wide surface area.
- -Various Applications: Since it can specifically adsorb phosphate sites, it can be applicable to the purification of phosphorylated peptides, phosphorylated sugars, glyphosate, etc.

#### **Experimental data**

Using Phos-Tio Kit, phosphorylated Angiotensin II was selectively extracted from mixture of Angiotensin II and phosphorylated Angiotensin II in only 40 minutes. The recovery rate was 81.6 ± 1.3%.

#### **HPLC Conditions**

Eluent

System : LC800 System
Column : InertSustain C18 HP

(3  $\mu$ m, 150 × 2.1 mml.D.) : A) 0.1% HCOOH in H<sub>2</sub>O

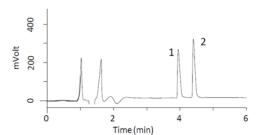
B) 0.1% HCOOH in CH<sub>3</sub>CN A/B =

85/15 - 5 min - 70/30, v/v

 $\begin{array}{lll} \textbf{Flow Rate} & : 0.3 \text{ mL/min} \\ \textbf{Col. Temp.} & : 40 \ ^{\circ}\textbf{C} \\ \textbf{Detection} & : UV \ 210 \ \text{nm} \\ \textbf{Inj. Vol.} & : 10 \ \mu \text{L} \\ \end{array}$ 

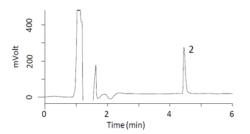
#### **Standard Solutions**

Angiotensin II
 [Tyr(PO<sub>3</sub>H<sub>2</sub>)<sup>4</sup>]-Angiotensin II
 50 mg/L
 50 mg/L



#### After Pretreatment with Phos-TiO Kit

Recovery Rate (n = 3): 81.6 ± 1.3%



[ Manufacturer : GLI]

#### **Product information**

Product Name	Code	Set Contents	Filling quantity / Tip volume	Storage	Price
Titansphere <sup>TM</sup> Phos-TiO Kit (Tip Type)	501021300	Tip column : 24 pieces Solution A : 2 mL Waste fluid tube : 24 pieces Solution B : 2 mL	1 mg / 10 μL	RT	
	501021305	Collection tube : 24 pieces Solution C : 200 p	L 3 mg / 200 μL		
	501021301	Tip column : 96 pieces Solution A : 6 mL	1 mg / 10 μL		
	501021306	Waste fluid tube: 96 pieces Solution B: 6 mL Collection tube: 96 pieces Solution C: 500 µ	L 3 mg / 200 μL		

<sup>\*</sup>Note: The centrifuge adapter is required, sold separately.

Product Name	Code	Size	Fill / Column	Storage	Price
Titansphere TM Phos-TiO	501021290	25 pieces	50 mg / 3 mL	DT	
for Large Volume Samples	501021291	25 pieces	100 mg / 3 mL	RT	

## Centrifuge Adapter: Usable for Titansphere<sup>™</sup> Phos-TiO Kit and GL-Tip series products.

Product Name	Code	Size	Applicable Tip	Storage	Price
Centrifuge Adapter	501021514	24 pieces	For 10 μL, 200 μL		
	501021340	1 piece	For 10 µL		
96 Well Plate Centrifuge	501021342	2 pieces	For 10 µL	RT	
Adapter	501021341	1 piece	For 200 µL		
	501021343	2 pieces	For 200 µL		

NOTE

- X All products here are research use only, not for diagnostic use.
- Specs might be changed for improvement without notice.
- Numbers after "#" represents product code.

\*\* Company name and product name are trademark or registered mark.
\*\* Please contact your local distributors for orders, quote request and inquiry.

#### Your Local Distributor



#### Bio-REV Pte. Ltd.

Block 211 Woodlands Avenue 9 #08-78/79 Woodlands Spectrum II Singapore 738 960

TEL: +65-6555-9001 FAX: +65-6555-9030 Email: sales@bio-rev.com

Technical Support: techserv@bio-rev.com

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