

UltraRIPA kit for Lipid Raft

For more information : http://www.funakoshi.co.jp/exports_contents/80549

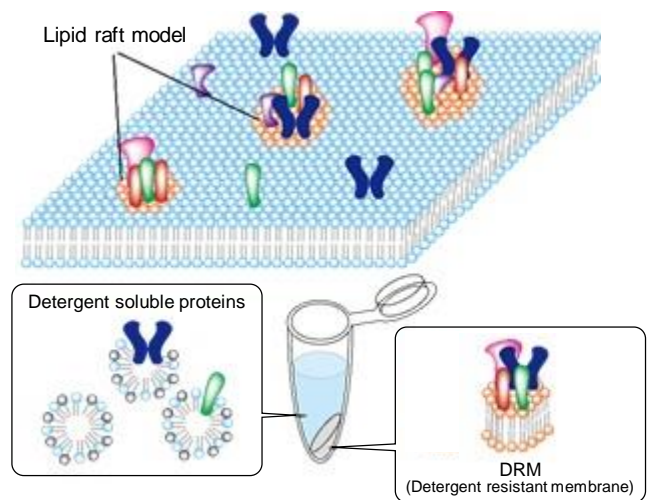
UltraRIPA kit can efficiently and rapidly extract membrane proteins or membrane-associated proteins enriched in lipid rafts with native structure and function.

Background

RIPA buffer is one of the most useful protein extraction buffers and maintains most native structures of proteins. However, it is not sufficient to extract membrane proteins and membrane-associated proteins concentrated in lipid raft.

Lipid raft is a highly unique microdomain on the lipid bilayer which contains special lipids, cholesterol and functional proteins. It is also called "Detergent Resistant Membrane (DRM)", as lipid raft-enriched proteins are usually insoluble in mild detergent buffers such as 1% Triton X-100 and RIPA buffer. Consequently, it was difficult to analyze the functions of lipid raft-enriched proteins.

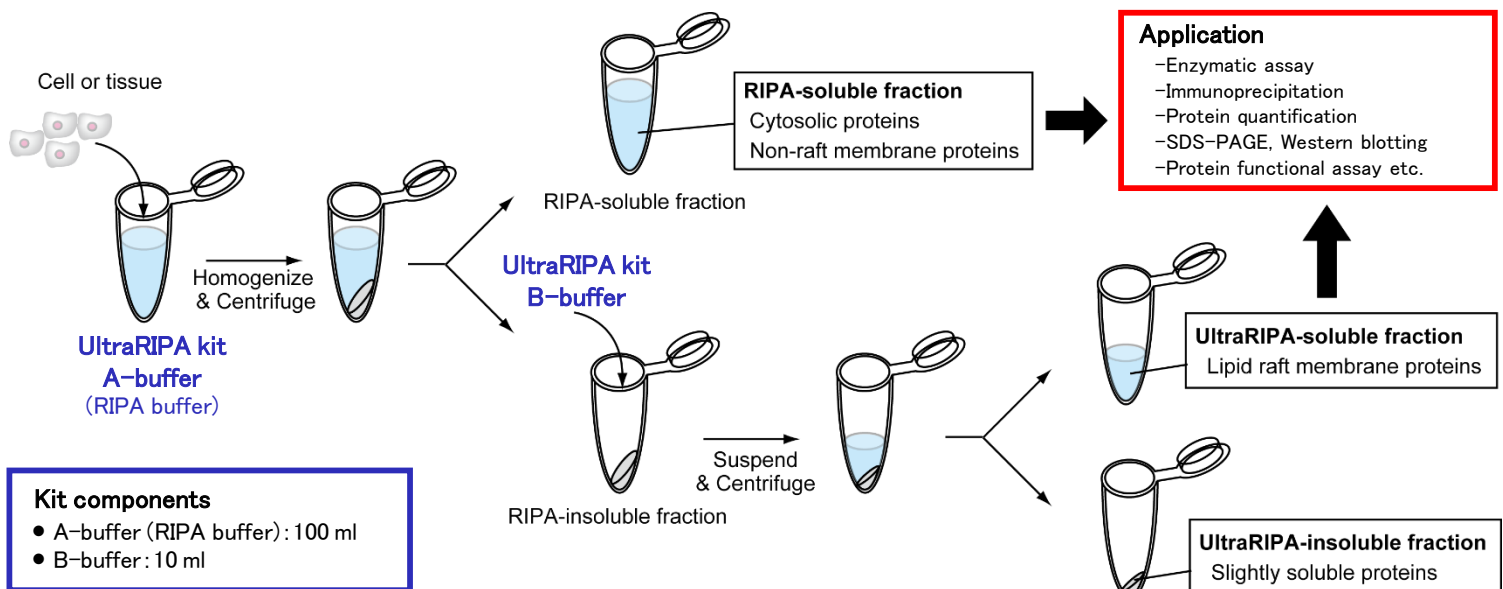
UltraRIPA kit for Lipid Raft provides a solution to extract and analyze such membrane proteins or membrane-associated proteins enriched in lipid rafts with native structure and function.



Features

- Simple and robust protocol
- Extract membrane / membrane associated proteins enriched in lipid rafts with native structure and function

Protocol



Example Data

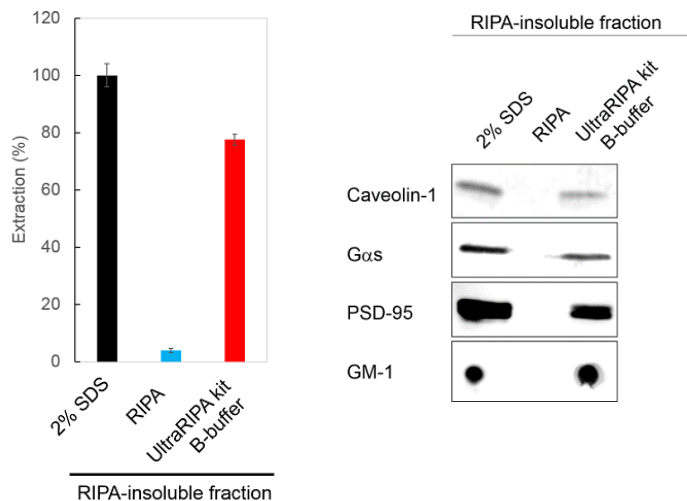


Figure 1 : Extraction of RIPA-insoluble proteins

Left : Quantification of extracted total proteins by BCA protein assay. UltraRIPA kit could constantly extract over 70% of RIPA-insoluble proteins from the mouse brain tissue.

Right : Western blotting of lipid raft markers. Some lipid raft markers among proteins or a ganglioside extracted were dramatically increased in RIPA-insoluble fraction by UltraRIPA kit.

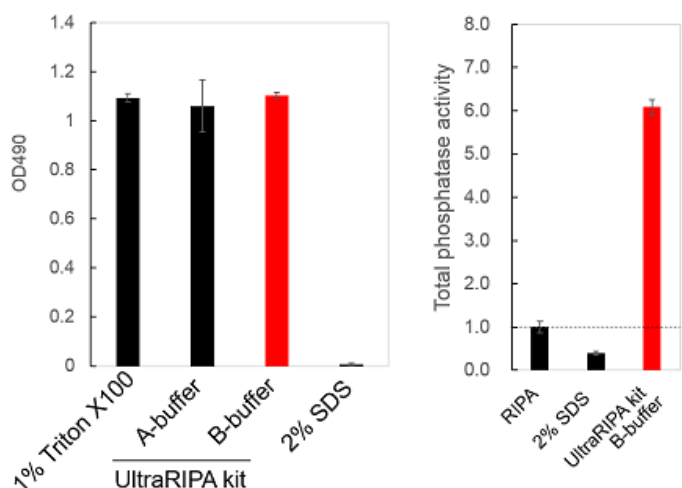


Figure 2 : Enzyme activity assay

Left : Lactate Dehydrogenase activity was evaluated by using 1% Triton X-100, A and B buffer. Equivalent enzyme activity are obtained when using A and B buffer.

Right : Total protein phosphatase activity. Protein extracts from RIPA-insoluble fraction of the mouse whole brain by UltraRIPA kit B-buffer, RIPA, and 2% SDS buffer were applied to total protein phosphatase assay. UltraRIPA kit shows greatly higher activity of protein phosphatases than RIPA buffer.

Overview of Application

	Protein extraction			Protein Structure	Protein Function	Application
	Cytosolic	Membrane				
		Non-lipid raft	Lipid raft			
>1%SDS buffer	○	○	○	×	×	SDS-PAGE
RIPA buffer	○	○	×	○	○	Enzymatic assay Immunoprecipitation SDS-PAGE etc.
UltraRIPA	○	○	○	○	○	

Product Information

[Manufacturer : BDL]

Product Name	Code	Size	Storage
UltraRIPA kit for Lipid Raft	F015	1 kit	4°C

NOTE

※ 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.

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