For Research Use Only

Product Name : UltraRIPA™ Buffer

Code No. : F015B

Size : 100 ml

Description :

Although RIPA (**R**adio-**I**mmuno**P**recipitation **A**ssay) buffer shows little effects on denaturation of proteins unlike 1-2% SDS buffer, it has high protein extraction ability from tissues and cells. The proteins extracted with RIPA buffer generally keep the functions such as protein structures and enzymatic activity. Therefore, RIPA buffer is one of the most useful buffer to extract proteins from tissues and cells for various assays of functional proteins. However, there are fractions even RIPA buffer cannot solubilize. Those fractions are called DRM (**D**etergent **r**esistant **m**embrane) or lipid raft. In general, it is difficult to analyze functions of the proteins because of its hard solubility in mild extraction buffers including RIPA buffer.

UltraRIPA™ buffer enable us to more efficiently extract DRM proteins than RIPA buffer, with little effects of denaturation. The proteins extracted with UltraRIPA™ buffer is useful for enzymatic activity and immunoprecipitation etc.

Formulation : Confidential
※This product does not contain protease inhibitors

Format : 1x UltraRIPA™ Buffer, Ready to use

Storage Condition : 4 °C

Product Shelf life : 1 year after the date of receipt

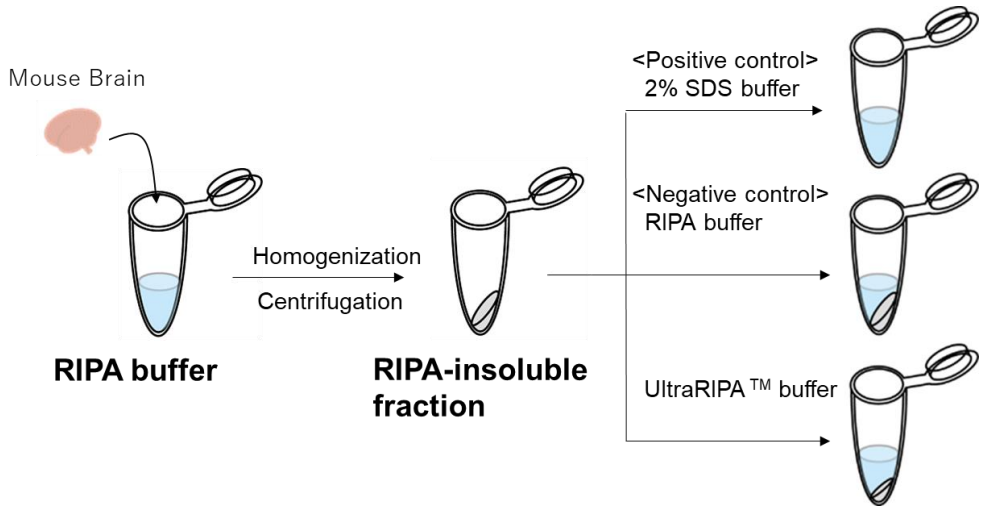
Related Products :

F015A-100 F015A-250	RIPA Buffer

BioDynamics Laboratory Inc.
www.biodynamics.co.jp

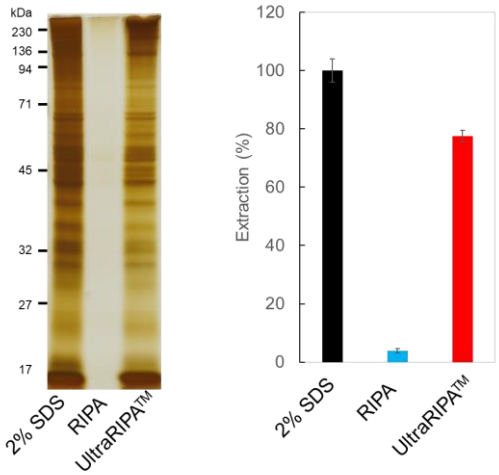
Protein Extraction :

Experimental procedure



A mouse brain was lysed with RIPA buffer and homogenized by a dounce tissue grinder and sonicator. After centrifugation of the lysate to remove RIPA-soluble supernatant, 2% SDS buffer, RIPA buffer, or UltraRIPA™ buffer was added to the RIPA-insoluble pellet and resuspended well. Each supernatant after centrifugation was applied to silver stain and BCA protein assay.

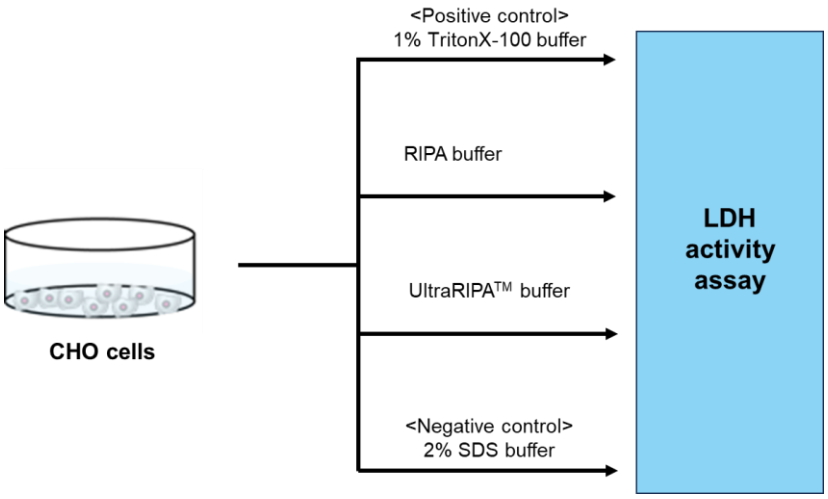
Experimental result



More than 70% of protein was extracted from RIPA-insoluble fraction using UltraRIPA™ buffer.

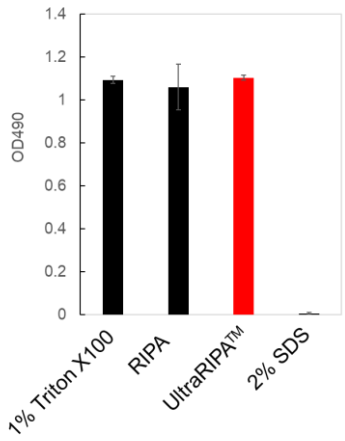
Enzymatic activity：

Experimental procedure



CHO cells were directly lysed in 1% Triton X-100 containing buffer, RIPA buffer, UltraRIPA™ buffer, or 2% SDS buffer, respectively. After centrifugation, lactate dehydrogenase (LDH) activity was measured from each supernatant.

Experimental result



LDH activity in supernatant extracted with UltraRIPA™ buffer was equivalent to those in Triton X-100 containing buffer and RIPA buffer.