LYSIS buffer: a choice depending on the specific aim

For maintaining the native form of a protein is a non-denaturing buffer.

- 1% Nonidet P-40 (NP-40) or Triton X-100
- 150 mM NaCl
- 50mM Tris-HCl (pH 8)
- 2mM EDTA (Optional)
- Proteinase Inhibitor (Phenylmethylsulfonyl fluoride and/or dithiothreitol) 1mM

For obtaining denatured protein is SDS lysis buffer.

- 2% SDS
- 50mM Tris-HCl (pH 8)
- 10mM EDTA
- 10% Glycerol
- Proteinase Inhibitor (Phenylmethylsulfonyl fluoride and/or dithiothreitol) 1mM

For obtaining sub-cellular proteins (mitochondrial or nuclear proteins)

Radioimmunoprecipitation assay (RIPA) buffer

- 150 mM NaCl
- 1% NP-40 or Triton X-100
- 50mM Tris-HCl (pH 8.0)
- 0.1% SDS
- 0.5% sodium deoxycholate Proteinase Inhibitor (Phenylmethylsulfonyl fluoride and/or dithiothreitol) 1mM