

Guidelines For Handling Proteins

These guidelines are general tips for use with handling proteins. Proteins require careful handling procedures to preserve protein function, stability, integrity, and prevent unwanted protein aggregation. Please refer to the data sheet(s), product web page, and Certificate of Analysis for information on individual proteins. In the absence of written guidance, contact Technical Support for recommendations on handling of specific proteins.

- Wear appropriate laboratory gear when handling proteins.
- Always centrifuge vial prior to opening to ensure that all protein material has been gathered towards the bottom of the vial.
- Some lyophilized proteins may be difficult to visualize in the tube. Appearance post-lyophilization will vary depending on the
 protein and the lyophilization buffer/methods used.
- Use the recommended reconstitution solution and concentration.
- The vial should be tightly capped at all times when not in use.
- It is usually best to work with protein solutions on wet ice. Lower temperatures help to retain protein activity levels and can help to prolong protein stability.
- Never vigorously agitate a protein sample. The preferred method of mixing protein solutions is to gently vortex or mix with a micropipettor using a polypropylene tip.
- Usually, a quick freeze and a quick thaw are the best methods for retaining protein activities. Avoid repeated freeze-thaw
 cycles. If a protein solution needs to be frequently taken from the stock material, then it is recommended to aliquot the stock
 protein material for future use after the initial thaw/reconstitution of the protein.
- For freezing proteins, clearly labeled polypropylene tubes are recommended for snap freezing. Transfer tubes to a pre-chilled box then place tubes in a -80 °C freezer.
- In the absence of a carrier protein, most proteins are unstable at very dilute concentrations. If stability in solution has not been verified, it is best to not dilute carrier-free solutions to protein concentrations below 100 μg/mL unless you intend to use the protein immediately.
- We offer a guarantee that our proteins will be good for 6 months when stored as received (i.e. before reconstitution and when stored at the suggested storage temperature). However, most proteins may be stable for longer than 6 months when stored as received.
- · Our products are for research use only.

www.enzolifesciences.com/proteins

Technical Support