

**Introduction**

Polyacrylamide gel electrophoresis (PAGE) has proven to be a useful tool for the separation of protein subunits and the determination of their molecular masses. **Adar's Biotinylated Protein Size-Markers** enables detection of size markers through biotin. For example HRP-Streptavidin may be used for the detection of the marker bands on blot or on film. The proteins included in **Adar's Biotinylated Protein Size-Markers** provide a suitable molecular mass range for most applications. Staining markers with Brilliant Blue R stain is possible. Protein bands are approximately equal in color intensity.

Table 1. Protein mixture composition

<b>Protein</b>	<b>MW (approximate)</b>
Myosin, porcine	200,000
$\beta$ -Galactosidase, from <i>E. coli</i>	116,000
Phosphorylase b, from rabbit muscle	97,000
Albumin, bovine	66,000
Albumin, from chicken egg white (Ovalbumin)	45,000
Carbonic Anhydrase, from bovine erythrocytes	29,000

Storage buffer: PBS pH 7.5

Storage condition: -20°C.

**A. Using Adar's Biotinylated Protein Size-Markers.**

1. Thaw vial, tap few times to mix content and remove approximately 5 ul of content to clean microtube. Process Size-Markers sample as other protein containing samples by adding sample buffer (typical sample buffer: 62.5 mM Tris

HCl, pH 6.8, containing 2% SDS, 5% 2-mercaptoethanol, 10% glycerol, and 0.002% bromophenol blue).

2. Incubate all samples in a boiling water bath for 1 minute and immediately load on gel.

### **B. Storage**

Keep Adar's Biotinylated Protein Size-Markers frozen between uses.