



162162

ABSTRACT OF THE DISCLOSURE

METHODS FOR SELECTIVELY STAINING WATER SOLUBLE PROTEIN USING REACTIVE DYE AND ITS APPLICATIONS THEREOF

A method of selectively staining the water-soluble protein in which a commonly

5 used reactive dye binds to the protein by reacting with a carboxyl group, amino group,
and thiol group from the amino acids that make up the protein. When the specimen to
be stained is an antibody, the reaction is adjusted to occur in an acidic environment so as
to promote reacting the reactive dye with the carboxyl groups of the amino acids of the
antibody and the carboxyl group of oligosaccharide conjugated to the constant region of
10 the antibody. The staining reaction occurs in an alkaline solution to produce a more
intense staining for the protein, without using the antibody as a marker ligand. After the
protein is stained with the reactive dye, an unreacted portion of portion dye molecules is
separated from the stained protein. The stained protein is purified and the stained
protein is further freeze-dried.

15 (FIG. 1)



G00002