

CTAB Buffer

Product	Con.	Cat#	Size
CTAB Buffer	1X	IBS-BC007	250ml

Components : 2% (w/v) CTAB (Cetyltrimethylammonium bromide), 100mM Tris-HCl pH 8.0, 20mM EDTA pH 8.0, 1.4M NaCl

Storage Conditions : Room Temperature

Stable for a minimum of 1 year from date of receipt at room temperature.

Introduction : cetyltrimethylammonium bromide ((C₁₆H₃₃)N(CH₃)₃Br, cetyltrimethylammonium bromide, hexadecyltrimethylammonium bromide, CTAB) is one of the components of the topical antiseptic cetrimide. The cetyltrimethylammonium (or hexadecyltrimethylammonium) cation is an effective antiseptic agent against bacteria and fungi.

It is a cationic surfactant. Its uses include providing a buffer solution for the extraction of DNA. It has been widely used in synthesis of gold nanoparticles (e.g., spheres, rods, bipyramids). It is also widely used in hair conditioning products.

Application :

- DNA Extraction : CTAB Buffer commonly used DNA Extraction procedure in Plants, Fungi and various tissues.

- Protein Electrophoresis : Because of the broad distribution of negative charges in glycoproteins, these form broad, fuzzy bands in SDS-PAGE (Laemmli-electrophoresis). This can be avoided by using positively charged detergents like CTAB instead of the negatively charged SDS. Proteins can be blotted from CTAB-gels in analogy to western blots, and CTAB-PAGE can be used as second dimension after IEF. Myelin-associated high hydrophobic protein can be analyzed using CTAB 2-DE

Caution : Prior to starting extraction, add polyvinylpyrrolidone and beta-mercaptoethanol. Once these have been added the shelf life of the buffer is only 2-3 days. Put the buffer in the water bath for 10-20 min. to dissolve the PVP. Don't's shake the buffer - the detergent will bubble up too much