The clinical sample storage cassettes provide stabilization, storage, and transportation of clinical samples for safe storage and downstream DNA analysis. It can also be used for stabilization and storage of sputum, urine, blood, saliva and the like for an extended period of time by preventing putrefaction of the sample. Further, drying of potentially infectious sample in air and punching of paper to obtain discs is eliminated. Thereby, it reduces chances of spread of infections and contamination.

BACKGROUND

Clinical samples sometimes need to be transported over long distances. The transportation time could last from days to weeks and in the absence of cold chains, samples are often putrefied and unfit for analysis by the time they reach the laboratory. Generally, for long distance transportation of blood sample, Dried Blood Spot (DBS) technology is used for collection of quantities significantly less than 1 mL, typically 40-50 microlitres. DBS technology is a form of bio-sampling where blood samples are blotted and dried on a filter paper. The dried filter paper is then shipped for analysis, for example DNA amplification, HPLC etc. However, DBS technology has not been modified for collection, stabilization, and storage of other clinical samples such as sputum, urine etc.

TECHNOLOGY

The present invention provides clinical sample storage cassettes for stabilization, storage, and transportation of clinical samples. It enables dry stabilization of large volumes of liquid clinical specimens that are contained in a sealed container for safe storage and downstream DNA analysis. The clinical sample storage cassette can be used for storage of clinical samples of quantities greater than 1 mL. It can also be used for stabilization and storage of sputum, urine, blood, and the like. Further, drying of potentially infectious sample in air and punching of paper to obtain discs is eliminated. Thereby, it reduces chances of spread of infections and contamination.