



Minute™ Anti-Clumping Nuclei Storage Buffer

Catalog number: WA-014

Description

The traditional method for nuclei isolation from animal cells/tissues depends on the use of non-ionic detergent to lyse the plasma membrane and release nuclei which can be subsequently isolated by low-speed centrifugation and further purified by density gradient. One major problem associated with the traditional method is the clumping of nuclei after isolation, which, in some applications such as DNA and RNA extraction, may not be a problem. However, in other applications such as single nucleus sequencing or proteomics, clumping of isolated nuclei represents a major problem. The anti-clumping nuclei storage buffer is designed to address this issue. Nuclei resuspended in this buffer show significantly reduced clumping as compared to those resuspended in PBS with 5% BSA. The nucleus suspension can be stored at 4°C for days without significant aggregation and change in morphology. The nuclei can also be frozen in the buffer at -80°C or in dry ice for transportation or long-term storage.

Package: 10 ml

Shipping and Storage: The buffer is shipped at ambient temperature and stored at 4°C upon arrival.

Method of Use

Resuspend isolated nuclear pellet in the buffer by gently pipetting up and down for 15-20 times. Generally, use 200-500 µl of storage buffer for 1-5 million of nuclei. Resuspended nuclei can be stored at 4°C for up to one week or frozen at -80°C for up to 12 months without significant change in morphologies. It is important to note that this buffer can reduce well separated nucleus from clumping but has limited efficacy to separate nuclei that have already clumped. It is recommended to use **Minute™ Single Nuclei Isolation Kits (Cat#: BN-020, NI-024, AN-029 or SN-047)** to obtain well separated nuclei to start with. Nuclei in the storage buffer can be collected by centrifuging at 600 X g for 5 min at 4°C followed by resuspending in buffer(s) suitable for downstream application(s).