

Viral Inactivation Buffer (VIB) Inactivir® SD LITE

The Life Science Group (LSG) Viral Inactivation Buffer Inactivir® SD LITE has been developed in collaboration with the University of Bedfordshire. Its formulation is based on established viral inactivation methods to provide a buffer that will inactivate viruses responsible for pandemics such as Covid-19 and seasonal influenza and epidemics such as SARS, MERS and Ebola.

This product has been developed to inactivate the pathogen in the collection tube containing a patient or other potentially pathogenic sample. It will lyse cells and denature any virus in the sample, rendering the virus inactive and non-pathogenic. This results in a non-pathogenic sample for testing. This buffer is designed for immediate testing procedures and to minimise additional components that could interfere with downstream detection. It does not contain additional components to inactivate potential degrading enzymes such as RNAses that may be present within a sample.

VIB Inactivir® SD LITE is designed for Point of Care (POC) or near-POC testing to allow safe handling of samples without the requirement for Category 2+/3 handling of potentially pathogenic samples. This is designed to enable safety assessments to validate limited liquid handling for POC and near-POC testing methods without the requirement for use of Class 2 safety cabinets.

The development of Inactivir SD LITE has focussed on its compatibility with 'direct to PCR' and loop-mediated isothermal amplification (LAMP) viral detection methods that provide additional convenience and efficiency as the nucleic-acid extraction step is eliminated. As the SD LITE formulation does not contain RNase inhibitors it is not suitable for storage of samples.

Validation data

This buffer has been shown to be compatible with specific manufacturer RT-QPCR assay mixed used in the detection of SARS nCoV-19 RNA using CDC published primer sets. It is also compatible with a range of standard RNA purification protocols used to provide purified RNA for RT-QPCR detection using the CDC primers. It has also been validated for LAMP detection methods for SARS nCoV-19 RNA using NEB (New England Biolabs) LAMP mastermix and published primer sets.

This buffer has been successfully validated by Public Health England and demonstrated that treatment with Inactivir SD LITE using 1 volume sample to 3 volumes product for 1 and 5 minutes reduced SARS-CoV-2 titre by $\geq 4.8 \log_{10}$ TCID₅₀/mL, below the limit of detection of the tests.

QUALITY - TRACEABILITY - INTEGRITY

Life Science Production

The Science Centre, 1 Blaydon Road, Sandy, Bedfordshire SG19 1RZ
Tel: 01234 889180 Email: sales@lifesciencegroup.co.uk Web: www.lifesciencegroup.co.uk

Life Science Production, Antibody Production Services and Diagnostic Kit Services are divisions of Life Science Group Ltd.

Company Registered in England Company Number 06606016



Product Presentation

| Product Code | Product Description | Size |
|--------------|--|--------|
| VIB-003A | Viral Inactivation Buffer (VIB) Inactivir® SD LITE | 500 mL |
| VIB-003C | Viral Inactivation Buffer (VIB) Inactivir® SD LITE | 50 mL |
| VIB-003E | Viral Inactivation Buffer (VIB) Inactivir® SD LITE | 10 mL |
| VIB-003U | Viral Inactivation Buffer (VIB) Inactivir® SD LITE | 3mL |

For transport of viral swab use only. Not approved for application to humans or animals, or for use in clinical or *in vitro* procedures. Contains hazardous reagents. Please consult SDS for list of precautionary measures. Inactivation reagents should not be assumed to be 100% effective against SARS-CoV-2.

QUALITY - TRACEABILITY - INTEGRITY

Life Science Production

The Science Centre, 1 Blaydon Road, Sandy, Bedfordshire SG19 1RZ
Tel: 01234 889180 Email: sales@lifesciencegroup.co.uk Web: www.lifesciencegroup.co.uk

Life Science Production, Antibody Production Services and Diagnostic Kit Services are divisions of Life Science Group Ltd.

Company Registered in England Company Number 06606016

