



**Document Number:** SASoM/EQUIP/094.v2

**Title:** Clare Chemical Dark Reader (Non-UV Transilluminator)

**Version:** v2

**Name:** Peter Mullen

Effective from:	01/02/2020
Valid to:	31/01/2025

SOP History		
Number	Date	Reason for Change
v1	01/02/2015	Original
v2	01/02/2020	Quinquennial Update

### 1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use of the Clare Chemical Dark Reader (Non-UV transilluminator) in Laboratory 248 at the St Andrews School of Medicine (SASoM).

### 2.0 Scope –

This SOP applies to routine use and maintenance of the Clare Chemical Dark Reader (Non-UV transilluminator) within the SASoM.

### 3.0 Responsibilities –

It is the responsibility of all users of the Clare Chemical Dark Reader (Non-UV transilluminator) within the SASoM to comply with this SOP. **NEVER USE ETHIDIUM BROMIDE STAINED GELS ON THE CLARE CHEMICAL DARK READER.**

#### 4.0 Procedure –

The Dark reader can be used for visualising fluorescently stained DNA, proteins, and other biological samples using a visible light source that excites fluorophores between 420-500nm. It consists of a visible light source and associated electronics housed in a box. An amber cover plate is provided which should be in place while viewing the sample.

**The machine is turned ON/OFF using the black button on the side of the box.**



A DR45M transilluminator is shown above 'at rest' and viewing a SYBR Gold-stained DNA gel.

**NEVER USE ETHIDIUM BROMIDE STAINED GELS ON THE CLARE CHEMICAL DARK READER.**

If excising a gel band, there are amber glasses that should be worn, while the amber cover plate has been removed. If available, a glass plate should be placed on the dark reader, with the gel on top for cutting out bands (to protect the dark reader blue screen).

#### 5.0 Personal protection –

Howie coat must be worn at all times. Gloves must always be worn. Appropriate Dark Reader amber vision glasses must be worn when cutting out a band on the dark reader. Otherwise, the Amber screen must be in place for viewing the band. Although this is not a UV light source, care should be taken whilst using the Dark reader.

#### 6.0 Training –

All users have to be trained before using the Instrument by a designated person.

#### 7.0 Related documents –

##### 7.1 Instruction Manual



## 8.0 Approval and sign off –

### Author:

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

### Management Approval:

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

### QA release by:

Name: Alex MacLellan

Position: QA Manager

Signature: Date:

Confidential

