

# 31377

# **Protoplast Fusion Kit from Plants (Teaching)**

Part E

## **Specifications**

Activity

Microscopy test

Place one drop of leaf or petal soaked in Macerozyme on to a microscopic slide. Place a cover-slip on the slide and observe spherical shaped protoplast under a microscope. Adding PEG to the mixture and icubated for 30 minutes for fusion of protplast. spherical shaped protoplast forms a dumble shaped structure indicating fusion.

#### **Other Information**

Description

Includes

Protoplast fusion is used to generate hybrids with useful characteristics in plants. Protoplasts are plant cells whose cell wall has been removed and only the thin plasmalemma surrounds it. They can be prepared from plant tissues like leaves and petals. Treatment of tissue with cell wall lysis enzymes separates cells from their connective tissues and breaks down the cell wall. The ensuing preparation consists of protoplasts. Fusion of these protoplasts is accomplished in the presence of polyethylene glycol and the fusion (see picture) can be viewed under a microscope.

Macerozyme - 1 g 0.6 M osmotic buffer - 30 ml Polyethylene Glycol - 1 ml Microscopic Slides - 30 Nos Cover slips - 50 Nos

# **General Information**

Storage
Includes components ranging from RT to -20°C
Shelf Life
12 Months
IMDG Identification
Not Regulated for Transport (Non-Haz)
HSN Code
15 expt. Kit
38229090 (GST 12%)

#### Available Packages

### Disclaimer