

## Timentin 新型农杆菌抑制剂

1g

5g

### Introduction

Timentin is a suitable antibiotic for *Agrobacterium* counterselection and a mixture of two antibiotics: ticarcillin and clavulanic acid. Most wild *Agrobacterium* isolates have beta-lactamase activity which clavulanic acid exhibits activity towards. Many *Agrobacterium* isolates are highly susceptible to Timentin. *Agrobacterium* strains carrying the standard pBR beta-lactamase gene are also Timentin (clavulanic acid) susceptible. **Timentin killing of *Agrobacterium* wild-type strains is three logs greater than with comparable doses of carbenicillin.** In plant transformation experiments, 0.1mg/ml Timentin is sufficient to counterselect *Agrobacterium*. To improve efficacy (of any antimicrobial), solid media are best slightly dried before use. At these concentrations, Timentin exhibits no phytotoxicity to *Arabidopsis* root cultures.

### Storage and Stability

Timentin power may be stored at 4°C in hermetically sealed container, protected from light. Stable for at least 12 months at 4°C.

### Description

White or faint yellow power.

### Stock Solution 100mg/ml in water

1. Weigh 1 g of Timentin.
2. Add 10 ml of dd H<sub>2</sub>O. Dissolve completely.
3. Sterilize Timentin Stock solution through the 0.22 µm syringe filter.
4. Stock solution protected from light may be kept at -20° C for 1 year.

### References

- 1 Zimmerman TW (1995) Effect of Timentin for controlling *Agrobacterium tumefaciens* following cocultivation on select plant species. *In Vitro Cell Dev Biol* 31:70A
- 2 Cheng Z M et al. Timentin as an alternative antibiotic for suppression of *Agrobacterium tumefaciens* in genetic transformation. *Plant Cell Reports* (1998) 17: 646-649