



Macerozyme R-10

离析酶R-10

● Description:

Macerozyme R-10 is derived from *Rhizopus sp.* It is a multi-enzymatic system consisting of high pectinase and hemicellulase activities and low cellulase activities. Macerozyme R-10 is useful in isolating single plant cells by degrading plant cell wall. It is often used with Cellulase Onozuka R-10 and Cellulase Onozuka RS.

Macerozyme R-10 contains 0.5 U/mg of pectinase activity, 0.25 U/mg of hemicellulase activity, and 0.1 U/mg of cellulase activity. The pectinase activity of Macerozyme R-10 is calculated as D-galacturonic acid; 0.5 unit of pectinase activity at pH 4.5 will liberate 1 μmol of its reducing group per minute at 25°C from pectic acid. As for hemicellulase activity, its activity is calculated as xylose; 0.25 unit of hemicellulase activity at pH 5.5 will liberate 1 μmol of its reducing group per hour at 37°C from beechwood xylan. Lastly, 0.1 unit of cellulase activity at pH 4.5 will liberate from sodium carboxymethyl cellulose 1 μmol of glucose at 40°C per minute.

● Specifications:

Source.....from *Rhizopus sp.*
Activity.....~3000 units/g dry weight
Appearance.....pale lyophilized solid
pH-optimum.....3.5 – 7.0
Solubility.....10mg/ml in H₂O

● Storage:

Power is stored in 4°C or -20°C for longer time. Following reconstitution, aliquot and freeze (-20°C) for long term storage or refrigerate (+4°C) for short term storage. This product is stable for 2 years as supplied. Stock solutions are stable for 3 days at +4°C or for 1 month at -20°C.

● References: