

Cellulase R-10 [Onozuka R-10]

Product ID c224

Description

Cellulase Onozuka R-10 contains high cellulase activity. It is often used in the isolation of plant protoplasts when combined with Macerozyme R-10 or other enzymes. It contains 1U/mg of cellulase activity, meaning one unit of cellulase will liberate 1 micro mole of glucose from carboxymethyl cellulose. Cellulase activity is inhibited by glucose and cellobiose. Moreover, it is completely inhibited by Hg²⁺ and slightly inhibited by Mn⁺, Ag²⁺, Zn²⁺ and Cu²⁺. Cellulase Onozuka R-10 also contains approximately 1 U/mg of hemicellulase activity, 0.80 U/mg of α-amylase activity, 0.4 U/mg of pectinase activity, and 0.01 U/mg of protease activity

Cellulase Onozuka R-10 is derived from *Trichoderma viride*. It is a multi-enzymatic system consisting of cellulase, α-amylase, hemicellulase, pectinase, and protease activity. Cellulase acts together with other enzymes to degrade cell walls by modifying celluloses, lichenin, and cereal β-D-glucans. It modifies cellulose by hydrolyzing 1,4-β-D-glucosidic linkages. Other enzyme like α-amylase break down 1,4-α-D-glucosidic linkages in polysaccharides while 1,4-α-D-galactosiduronic linkages in galacturans are randomly cleaved by pectinase.

Product Information

Solubility	Water
Powder Form	Powder
Product Number	C224
CAS Number	9012-54-

Shipping and Storage

Storage Temp.	2 to 8 °C
Tariff Code	3507.90.7000

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