Dissociation Reagents

Dispase, ACF

Animal component-free non-specific protease

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Catalog #07446	10 mg
#100-0396	50 mg

Product Description

Dispase, Animal Component-Free (ACF) is a neutral, amino-endoprotease that cleaves the N-terminal peptide bond of non-polar amino acid residues and is obtained from cultures free of animal-derived materials. Dispase has mild proteolytic activity, which makes it especially useful for the isolation and passaging of primary cells. Its proteolytic activity also allows it to maintain membrane integrity. Dispase is commonly used with other proteases such as collagenase in cell isolation and for dissociation of tissues such as neural (Dietrich et al.), kidney (Presnell et al.), epithelial (Smoot et al.), endothelial (Müller et al.), lung (Barkauskas et al.), and colon (Roig et al.), as well as dissociation of stem cells (Salmon et al.; Thomson et al.).

Product Information

Alternative Names:	Neutral protease, Proteinase
Format:	Lyophilized powder
Storage:	Store at 2 - 8°C. If not used immediately, aliquot and store at -20°C or -80°C.
Stability:	Stable as supplied for 12 months from date of receipt. Stability may vary depending on factors such as diluent, concentration, handling, and application. Avoid repeated freeze-thaw cycles.
Reconstitution:	Reconstitute prior to use in a balanced salt solution or buffer of choice. Reconstitution in buffers with Ca++ and Mg++ (e.g. Hanks' Balanced Salt Solution [HBSS] or Dulbecco's phosphate-buffered saline [D-PBS] with Ca++ and Mg++) is recommended, as calcium- and magnesium-free buffers may cause haziness at higher Dispase concentrations (5 - 10 mg/mL).
Molecular Weight:	32.5 kDa
CAS Number:	42613-33-2
Optimum pH:	5.9 - 7
Cleavage Site:	-X- † -Leu/Phe- † -Y- : X/Y = nonspecific

Please refer to the Safety Data Sheet (SDS) for hazard information.

Specifications

Source:	Bacillus polymyxa
Activity:	≥ 4 units/mg dry weight. See Notes and Tips for further information.

Notes and Tips

1 unit releases 1 µmol folin-positive amino acids equivalent to 1 µmol tyrosine/minute from casein at 37°C, pH 7.5.

Related Products

For a complete list of dissociation reagents, as well as related products available from STEMCELL Technologies, visit www.stemcell.com, or contact us at techsupport@stemcell.com.

References

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