Dissociation Reagents

Soybean Trypsin Inhibitor, ACF

For inhibition of trypsin activity

Catalog #	07457	1 g
	07458	10 g

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Product Description

Soybean Trypsin Inhibitor, Animal Component-Free (ACF) is obtained from cultures free of animal-derived materials. This trypsin inhibitor consists of a single polypeptide chain with two disulfide bridges and inactivates trypsin on an equimolar basis. It is able to inhibit chymotrypsin to a lesser extent, but is ineffective against esterolytic, proteolytic, or elastolytic activities of porcine elastase (Vered et al.). Soybean Trypsin Inhibitor has also been shown to inhibit human and bovine thrombin, plasmin, and leukocytic proteases.

Product Information

Alternative Names:	Antitrypsin; Trypsin inhibitor; Trypsin protease inhibitor
Format:	Lyophilized powder
Storage:	Store at 2 - 8°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Reconstitution:	Dissociation reagents can be reconstituted in a balanced salt solution or buffer of choice.
Molecular Weight:	21.5 ± 0.8 kDa
CAS Number:	9035-81-8
Optimum pH:	7.0
Cleavage Site:	N/A

Specifications

Source:	Soybean
Activity:	1 mg inhibits at least 0.75 mg trypsin. See Notes for further information.

Related Products

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

Notes

ACTIVITY UNITS
Activity is expressed as the amount of twice-crystallized trypsin inhibited/mg of inhibitor.

References

Breggia AC & Himmelfarb J. (2008) Primary mouse renal tubular epithelial cells have variable injury tolerance to ischemic and chemical mediators of oxidative stress. Oxid Med Cell Longev 1(1): 33–8.
Cunningham R et al. (2005) Defective PTH regulation of sodium-dependent phosphate transport in NHERF-1-/- renal proximal tubule cells and wild-type cells adapted to low phosphate media. Am J Physiol Renal Physiol 289: F933–8.
Gout J et al. (2013) Isolation and culture of mouse primary pancreatic acinar cells. J Vis Exp (78): 1–8.
Kunitz M. (1947) Crystalline soybean trypsin inhibitor II. General Properties. J Gen Physiol 30(4): 291–310.
Minamoto K & Pinsky DJ. (2002) Recipient iNOS but not eNOS deficiency reduces luminal narrowing in tracheal allografts. J Exp Med 196(10): 1321–33.
Rackis JJ et al. (1962) Soybean trypsin inhibitors: Isolation, purification and physical properties. Arch Biochem Biophys 98(3): 471–8.
Smoot DT et al. (2000) A method for establishing primary cultures of human gastric epithelial cells. Methods Cell Sci 22(2-3): 133–6.
Stallmach A et al. (1998) Increased state of activation of CD4 positive T cells and elevated interferon gamma production in pouchitis. Gut 43(4): 499–505.
Vered M et al. (1981) Inhibition of porcine elastase II by chicken ovoinhibitor. Int J Pept Protein Res 18(2): 169–79.
Wang Y et al. (2006) Slc26a6 regulates CFTR activity in vivo to determine pancreatic duct HCO3- secretion: relevance to cystic fibrosis. EMBO J 25(21): 5049–57.