Data Sheet

AEBSF, Hydrochloride - CAS 30827-99-7 - Calbiochem

Note that this data sheet is not lot-specific and is representative of the current specifications for this product. Please consult the vial label and the certificate of analysis for information on specific lots. Also note that shipping conditions may differ from storage conditions.

Revision	27-September-2013 JSW
Synonyms	4-(2-Aminoethyl)benzenesulfonylfluoride, HCl
Application Data	Inhibition of Proteases by AEBSF vs. PMSF $K_{app}/[I]$ ($mol^{-1}s^{-1}$) Protease — AEBSF — PMSF Trypsin — 14.00 — 2.57 Chymotrypsin — 18.70 — 25.0 Plasmin — 0.36 — ≤0.05 Thrombin — 1.62 — 1.95 Plasma kallikrein — 0.68 — 0.07 Tissue kallikrein — 0.19 — ≤0.05
Description	Specific irreversible inhibitor of serine proteases. Reacts covalently with a serine at the active site. Inhibits chymotrypsin, kallikrein, plasmin, thrombin, trypsin, and related thrombolytic enzymes. Stable, nontoxic alternative to PMSF (Cat. No. 52332) and DFP (Cat. No. 30967). Used at the same molar concentration (0.1-1.0 mM) as PMSF for most applications. Exhibits low inhibitory activity towards proteinase K.
Form	White to off-white solid
Inert gas	Packaged under inert gas
CAS number	30827-99-7
Chemical formula	$C_8H_{10}FNO_2S \cdot HCl$
Purity	>97% by HPLC
Solubility	H_2O (25 mg/ml)
Storage	Protect from moisture -20°C
Do Not Freeze	Ok to freeze
Special Instructions	Following reconstitution, store in the refrigerator (4°C). Aqueous stock solutions are stable for up to 2 months at 4°C. Slight hydrolysis occurs at alkaline pH (8-9).
Toxicity	Standard Handling
References	Citron, M., et al. 1996. Neuron 17, 171. Ohkubo, I., et al. 1994. J. Biochem. 116, 1182. Mintz, G.R. 1993. BioPharm. 6, 34. Lawson, W.B., et al. 1982. Folia Haematol. 109, 52. Markwardt, F., et al. 1974. Biochem. Pharmacol. 23, 2247. Markwardt, F., et al. 1973. Thromb. Res. 2, 343. Baker, B.R., and Cory, M. 1971. J. Med. Chem. 14, 119.

Citation	Catherine Mee-Hie Cho, Ashok Mulchandani and Wilfred Chen. (2006) Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides . Protein Engineering Design and Selection 19, 99-105. Ok Hee Ryu, et al. (2005) Proteolysis of MIP-1α isoforms LD78β and LD78α by neutrophil-derived serine proteases . Journal of Biological Chemistry 280, 17415-17421. Sharon Yagur-Kroll and Orna Amster-Choder. (2005) Dynamic membrane topology of the E. coli -glucoside transporter β-glucosidase transporter BglF . Journal of Biological Chemistry 280, 19306-19318. Valerie A. Fadok, et al. (2001) Differential Effects of Apoptotic Versus Lysed Cells on Macrophage Production of Cytokines: Role of Proteases . Journal of Immunology 166, 6847-6854.

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada.
The vibrant M and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany
or its affiliates. Detailed information on trademarks is available via publicly accessible resources.
© 2026 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.