Data Sheet

Calpeptin - CAS 117591-20-5 - 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	08-October-2007 JSW
Synonyms	Benzyloxycarbonylleucyl-norleucinal
Description	A cell-permeable calpain inhibitor. Inactivates calpain I (ID_{50} = 52 nM), calpain II (ID_{50} = 34 nM), and papain (ID_{50} = 138 nM). Promotes neurite elongation in differentiating PC12 cells. Prevents Ca^{2+}-ionophore induced degradation of actin binding protein and P_{235} in platelets. Inhibits myosin light chain phosphorylation in platelets stimulated by collagen, ionomycin, or thrombin. Inhibits the growth of estrogen receptor positive breast cancer cells.
Form	White to off-white solid
Inert gas	Packaged under inert gas
CAS number	117591-20-5
Chemical formula	$C_{20}H_{30}N_2O_4$
Peptide Sequence	Z-Leu-Nle-CHO
Purity	94% by HPLC
Solubility	DMF (5 mg/ml) or DMSO (5 mg/ml). Dissolve in a minimal amount of DMF or DMSO then add H_2O, buffer or medium just prior to use.
Storage	-20°C
Do Not Freeze	Ok to freeze
Special Instructions	Following reconstitution, aliquot and freeze (-20°C). Stock solutions are stable for up to 2 months at -20°C.
Toxicity	Standard Handling
References	Lee, M.S., et al. 2000. Nature 405, 360. Yamazaki, T., et al. 1997. Biochemistry 27, 8377. Klafki, H., et al. 1996. J. Biol. Chem. 271, 28655. Shiba, E., et al. 1996. Anticancer Res. 16, 773. Pinter, M., et al. 1994. Neurosci. Lett. 170, 91. Saito, K., and Nixon, R.A. 1993. Neurochem. Res. 18, 231. Tsujinaka, T., et al. 1988. Biochem. Biophys. Res. Commun. 153, 1201.
Citation	Rosenberger, G., et al. 2005. Journal of Biological Chemistry 280, 6879. Rios-Doria, J., et al. 2004. Cancer Research 64, 7237.

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