

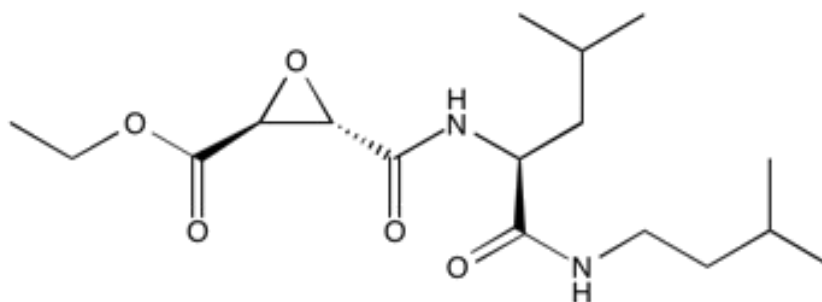
**Catalog # 10-1347**

**E-64d**

CAS# 88321-09-9

2S,3S-trans-(Ethoxycarboxyloxirane-2-carbonyl)-L-leucine-(3-methylbutyl)amide

Lot # X101467



Cell-permeable derivative of E-64c, an inhibitor of calpain and other cysteine proteases, such as papain, cathepsin B and cathepsin L.<sup>1,2</sup> Addition to cell cultures should be done in serum-free media as esterases in serum will cleave the ethyl ester and reduce cell permeability. Typical working concentration is 0.5-10 µg/ml. Inhibits degradation of autophagic cargo inside autolysosomes<sup>3</sup>

- 1) McGowan *et al.* (1989), *Inhibition of calpain in intact platelets by the thiol protease inhibitor E-64d*; *Biochem. Biophys. Res. Commun.*, **158** 432
- 2) Wilcox and Mason (1992), *Inhibition of cysteine proteinases in lysosomes and whole cells*; *Biochem. J.*, **285** 495
- 3) Mizushima *et al.* (2010), *Methods in mammalian autophagy research*; *Cell*, **140** 313

**PHYSICAL DATA**

Molecular Weight:	342.43
Molecular Formula:	C <sub>17</sub> H <sub>30</sub> N <sub>2</sub> O <sub>5</sub>
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml), or Ethanol (up to 10 mg/ml)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**