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## DATASHEET

Thapsigargin

### Product overview

<b>Name</b>	Thapsigargin
<b>Cat No</b>	HB1118
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>97%
<b>Description</b>	Potent, non-competitive SERCA inhibitor

### Images



### Biological Data

<b>Biological description</b>	Potent and non-competitive sarco-endoplasmic $\text{Ca}^{2+}$ -ATPase (SERCA) inhibitor. Activates endoplasmic reticulum stress mechanisms. Induces apoptosis in most cells. Shows anticancer and neuroprotective actions.
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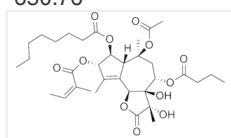
### Solubility & Handling

<b>Storage instructions</b>	-20°C (desiccate)
<b>Solubility overview</b>	Soluble in DMSO (100mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	(3 <i>S</i> ,3 <i>a</i> <i>R</i> ,4 <i>S</i> ,6 <i>S</i> ,6 <i>A</i> <i>R</i> ,7 <i>S</i> ,8 <i>S</i> ,9 <i>b</i> <i>S</i> )-6-(Acetyloxy)-2,3,3 <i>a</i> ,4,5,6,6 <i>a</i> ,7,8,9 <i>b</i> -decahydro-3,3 <i>a</i> -dihydroxy-3,6,9-trimethyl-8-[[[(2 <i>Z</i> )-2-methyl-1-oxo-2-butenyl]oxy]-2-oxo-4-(1-oxobutoxy)azuleno[4,5- <i>b</i> ]furan-7-yl] octanoate 650.76
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**Molecular Weight**  
**Chemical structure**



**Molecular Formula**

$\text{C}_{34}\text{H}_{50}\text{O}_{12}$

<b>CAS Number</b>	67526-95-8
<b>PubChem identifier</b>	446378
<b>SMILES</b>	<chem>CCCCCCCC(=O)O[C@H]1[C@H]2C(=C([C@@H]1OC(=O)/C(=C\C)/C)C)[C@H]3[C@]([C@H](C[C@]2(C)OC(=O)C)OC(=O)CCC)([C@](C(=O)O3)(C)O)O</chem>
<b>InChi</b>	InChI=1S/C34H50O12/c1-9-12-13-14-15-17-24(37)43-28-26-25(20(5)27(28)44-30(38)19(4)11-3)29-34(41,33(8,40)31(39)45-29)22(42-23(36)16-10-2)18-32(26,7)46-21(6)35/h11,22,26-29,40-41H,9-10,12-18H2,1-8H3/b19-11-/t22-,26+,27-,28-,29-,32-,33+,34+/m0/s1
<b>InChiKey</b>	IXFPJGBNCFXKPI-FSIHEZPISA-N
<b>MDL number</b>	MFCD00083511

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## References

### Endoplasmic reticulum stress induced by tunicamycin and thapsigargin protects against transient ischemic brain injury: Involvement of PARK2-dependent mitophagy.

Zhang X *et al* (2014) *Autophagy* 10(10)

**PubMedID** [25126734](#)

### Targeting thapsigargin towards tumors.

Doan NT *et al* (2014) *Steroids*

**PubMedID** [25065587](#)

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