

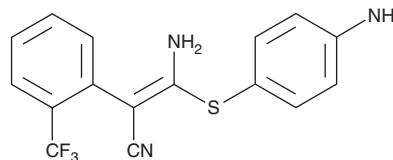
# PRODUCT INFORMATION



**SL 327**

Item No. 15598

**CAS Registry No.:** 305350-87-2  
**Formal Name:**  $\alpha$ -[amino[(4-aminophenyl)thio]methylene]-2-(trifluoromethyl)benzeneacetonitrile  
**MF:** C<sub>16</sub>H<sub>12</sub>F<sub>3</sub>N<sub>3</sub>S  
**FW:** 335.4  
**Purity:**  $\geq 95\%$  (mixture of *cis/trans* isomers)  
**UV/Vis.:**  $\lambda_{\max}$ : 278 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

SL 327 is supplied as a crystalline solid. A stock solution may be made by dissolving the SL 327 in the solvent of choice, which should be purged with an inert gas. SL 327 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

## Description

The dual specific threonine/tyrosine kinase MEK is a key component of the RAS/RAF/MEK/ERK signaling pathway that regulates a diverse array of cellular processes. SL 327 is an inhibitor of MEK1 and MEK2 (IC<sub>50</sub>s = 0.18 and 0.22  $\mu$ M), the kinases upstream of ERK1/2.<sup>1</sup> It inhibits ERK1, MKK/p38, MKK4, JNK, and PKC at much higher concentrations (IC<sub>50</sub>s = >50, 21, >100, >100, >10  $\mu$ M, respectively).<sup>1</sup> Since SL 327 rapidly passes the blood-brain barrier, it has been used to dissect the effect of RAS/RAF/MEK/ERK signaling pathway inhibition on behavior, including long-term memory, spatial learning, and fear/operant conditioning.<sup>2</sup>

## References

1. Scherle, P.A., Ma, W.g., Lim, H., *et al.* Regulation of cyclooxygenase-2 induction in the mouse uterus during decidualization. *J. Biol. Chem.* **275**(47), 37086-37092 (2000).
2. Fasano, S. and Brambilla, R. Ras-ERK signaling in behavior: Old questions and new perspectives. *Front. Behav. Neurosci.* **5**(79), (2011).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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