

Cat No. 18-N27

NSC74589

5mg



For research purposes only

NSC74589, also known as S3I-201, binds the Stat3-SH2 domain and prevents Stat3 phosphorylation/activation, dimerization, DNA-binding, and Stat3-dependent transcription, therefore, inhibiting growth and inducing apoptosis preferentially in tumor cells that contain persistently activated Stat3. Moreover, NSC74589 also inhibits the expression of the Stat3-regulated genes encoding cyclin D1, Bcl-xL, and survivin.

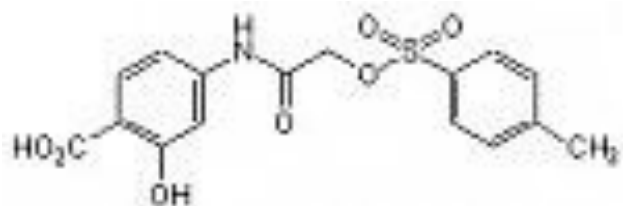
## TECHNICAL INFORMATION

## STORAGE AND HANDLING

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

**Stability:** Stock solutions stable at -20°C for up to 2 years.

**Shipping Conditions:** Shipped at room temperature.



## PRODUCT USE

Soluble in  $\geq 73$  mg/mL of DMSO.

**Other Names:** 2-hydroxy-4(2-(tosyloxy)acetamido)benzoic acid

**Chemical Formula:** C<sub>16</sub>H<sub>15</sub>NO<sub>7</sub>S

**CAS Number:** 501919-59-1

**PubChem Substance ID:** 24188297

**Molecular Weight:** 365.36

**Purity:** >98%

**Appearance:** Light Beige Solid

**Solubility:** DMSO

**IC<sub>50</sub> :** STAT3 86  $\mu$ M

## REFERENCES

1. Hu, Q.D., et al (2012). NSC74589 enhances doxorubicin cytotoxicity via inhibition of epithelial-mesenchymal transition in hepatocellular carcinoma cells. Cancer Lett. 28:207-13.
2. Chen, W., et al (2012). NSC74589-mediated inhibition of STAT3 enhances the anti-proliferative activity of cetuximab in hepatocellular carcinoma. Liver int. 32:70-7.