

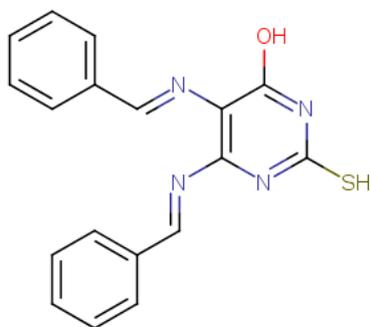
**SCR7 pyrazine**

**Cat. No. 5342**

**Advice from Tocris about SCR7**

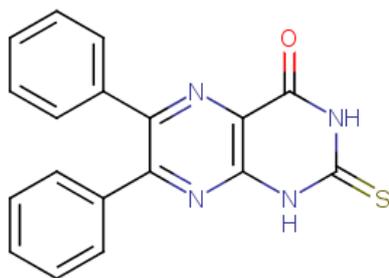
The compound SCR7 has recently been highlighted in a number of high profile papers as a tool to enhance the efficiency of CRISPR-Cas9 genome editing (see Maruyama *et al.* (2015) *Nat. Biotechnol.* **33** 538, and others). The compound was originally reported in 2012 as an inhibitor of DNA ligase IV by Srivastava *et al.*, and it is commercially available from a number of vendors.

We have discovered that the commercially available 'SCR7' material supplied by other vendors does not match the chemical structure that it is being sold under (figure 1).



**Figure 1: Chemical Structure of SCR7.** This structure is claimed to match the material that is commercially available, but our chemical analysis disputes this.

We believe that the commercially available 'SCR7' material, including that used in recent publications to enhance CRISPR efficiency, is in fact an analog of SCR7 that we have named 'SCR7 pyrazine' (figure 2).



**Figure 2: Chemical Structure of SCR7 pyrazine.** Tocris' Analytical Quality Control team has identified that this is the true chemical structure of the commercially available SCR7, and therefore the compound that has been shown to enhance the efficiency of CRISPR-Cas9 genome editing is in fact SCR7 pyrazine.

Tocris Bioscience has recently released SCR7 pyrazine (Cat. No. 5342). Our material is identical to the material sold by other vendors, and that which was used to enhance CRISPR efficiency. We are the first commercial vendor to offer this material for sale with the correct chemical structure.

Whilst there is no question of the remarkable effect of SCR7 pyrazine on enhancing the efficiency of CRISPR, researchers have unfortunately been misinformed about the precise identity of the compound that they have been using.

Tocris believes that it is vitally important that researchers are given correct chemical information about any product that they purchase, including the exact chemical identity. The stringent quality control analysis carried out by Tocris ensures that researchers can trust the identity, purity and quality of every Tocris product.

We are currently the only supplier correctly advertising SCR7 pyrazine.

### **Tocris Quality**

Our quality is second to none; we carry out detailed chemical verification of every product to ensure that the purity of our products are greater than 98% by HPLC. We have a large team of PhD level, experienced organic chemists and analysts who work to maintain this industry-leading quality across our entire range.

For any technical enquiries about this product, please contact [techsupport@bio-techne.com](mailto:techsupport@bio-techne.com)