

Description

Product Name	Fluorochemical Library
Brief Description	<p>Fluorine atoms have a unique combination of electronic and physical properties. As such, when incorporated into active pharmaceutical ingredients (APIs), fluorine atoms often influence their protein binding affinity and lipophilicity but not the shape of the resulting fluorochemicals. Fluorination can thus significantly impact the bioavailability or metabolic stability of drug substances.</p> <p>The pivotal role that the element fluorine plays in modulating the properties of bioactive molecules is reflected by the growth of its presence in approved drugs, as evidenced by the fact that between 15% to 20% of all medicines and agrochemicals on the market contain at least one fluorine atom in their structure. As of 2009, the FDA had approved >140 fluorine-containing drugs, such as fluorouracil, Miglitol, Gemcitabine, Sofosbuvir, atorvastatin, fluoxetine, ciprofloxacin, etc.</p> <p>The judicious introduction of fluorine into a molecule can productively influence conformation, pKa, intrinsic potency, membrane permeability, metabolic pathways, and pharmacokinetic properties.</p> <p>Nowadays, the application of specialty fluorochemicals in the pharmaceutical industry has been increasingly widespread. SABs fluorochemical library has become an effective tool for developing new anticancer drugs, anesthetics, antidepressants, antifungals, antiviral drugs, antibiotics, cholesterol lowering agents, and anti-inflammatory agents. In addition, in agricultural uses, the addition of fluorine to many agricultural herbicides, pesticides, and fungicides improves the potency and therefore reduces the required application rate of these substances</p>
Storage	<p>Powder or pre-dissolved DMSO solutions in 96 well plate with optional 2D barcode Shipped with blue ice;</p> <p>Stable for One year as powder, 6 months at - 20 ° C in DMSO or 12months at -80 ° C in DMSO</p>

Application Details

Number of Compounds:586

Product Description

A unique collection of 586 fluorochemicals that can be used for high through-put screening (HTS) and high content screening (HCS); Bioactivity and safety confirmed by pre-clinical research and clinical trials, and some of them are approved by FDA; Detailed compound information with structure, target, activity, IC50 value, and biological activity description; NMR and HPLC validated to ensure high purity and quality; All compounds are in stock

Note: This product is for in vitro research use only