

(-)-Sparteine is Back!

For over four decades, **(-)-sparteine** (also known as lupinidine) has been a **workhorse reagent** in asymmetric synthesis, widely used in both academic laboratories and industry. Its high solubility, strong metal-binding properties, and **excellent asymmetric induction** made it the preferred chiral modifier for lithium and titanium atoms, particularly in asymmetric deprotonation and the Crimmins aldol reaction.

Despite never being surpassed in selectivity or performance, recent price fluctuations and supply shortages have led to a forced decline in the use of (-)-sparteine. As a result, chemists have been forced to turn to less efficient but more readily available alternative reagents.

In response to this demand, **we are reintroducing (-)-sparteine to the market**, aiming to serve the synthetic community worldwide. We are committed to maintaining the highest standards of chemical and optical purity through our in-house processing and quality control, ensuring our customers can rely on optimal and consistent performance.

Expert view:

The quality and purity of Li-specific ligands have a significant impact on the outcomes of asymmetric transformations involving organolithium reagents and intermediates. Even trace amounts of Lewis bases, such as water, ethers, or bicarbonate ions, can result in a substantial drop in asymmetric induction and poor reproducibility.

In my experience, **(-)-sparteine from Galochrom delivers optimal performance**, identical to that of freshly – and laboriously – purified reagent in asymmetric conjugate addition reactions.

Dr. Tomáš Mašek

