BRAF Inhibitor LUT014

National Cancer Institute

Source

National Cancer Institute. BRAF Inhibitor LUT014. NCI Thesaurus. Code C159531.

A topically bioavailable small molecule inhibitor of serine/threonine-protein kinase B-raf (BRAF) protein with potential chemoprotective activity. Upon topical administration, BRAF inhibitor LUT014 targets and binds BRAF and, through the paradoxical effect of BRAF inhibition, induces mitogen-activated protein kinase (MAPK) signaling, which leads to the proliferation and migration of healthy human keratinocytes. This decreases dermal toxicities associated with epidermal growth factor (EGFR) inhibitor therapy. BRAF, a member of the raf family of serine/threonine protein kinases, plays a role in the regulation of MAPK/extracellular signal-regulated kinase (ERK) signaling pathways.