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# Birabresib

National Cancer Institute

## Source

National Cancer Institute. *Birabresib*. NCI Thesaurus. Code C103298.

A synthetic, small molecule inhibitor of the BET (Bromodomain and Extra-Terminal) family of bromodomain-containing proteins 2, 3 and 4 with potential antineoplastic activity. Upon administration, birabresib binds to the acetylated lysine recognition motifs on the bromodomain of BET proteins, thereby preventing the interaction between the BET proteins and acetylated histone peptides. This disrupts chromatin remodeling and gene expression. Prevention of the expression of certain growth-promoting genes, including c-Myc-dependent target genes, may lead to an inhibition of tumor cell growth. Characterized by a tandem repeat of bromodomain at the N-terminus, the BET proteins BRD2, BRD3, BRD4 are transcriptional regulators that play an important role in cellular growth.