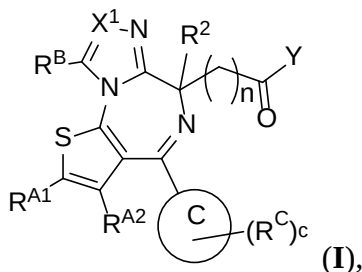


CLAIMS

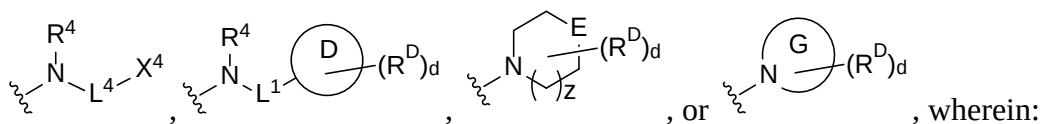
What is claimed is:

1. A compound of Formula (I):



or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, wherein:

Y is of formula:



R^4 is hydrogen, optionally substituted alkyl, optionally substituted acyl, or a nitrogen protecting group;

L^1 is optionally substituted alkylene;

L^4 is unsubstituted branched alkylene or substituted alkylene;

X^4 is halogen, $-OR^f$, $-SR^f$, or $-N(R^f)_2$;

Ring D is a carbocyclic or a heterocyclic ring, wherein the heterocyclic ring contains one heteroatom, and the heteroatom is N;

Ring G is a bicyclic heterocyclic or bicyclic heteroaryl ring, wherein the rings share exactly two atoms;

E is O, S, NR^E , or CHR^E , wherein R^E is optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted heteroaryl;

each occurrence of R^D is independently hydrogen, halogen, optionally substituted alkyl, optionally substituted heteroalkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$, or two R^D attached to adjacent atoms are joined to form an optionally substituted

carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl ring;

z is 0, 1, or 2; and

d is 0, 1, 2, 3, or 4;

R^{A1} is hydrogen, halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$;

R^{A2} is hydrogen, halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$;

X^1 is N or CR^5 , wherein R^5 is hydrogen, halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$;

R^B is hydrogen, halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$;

Ring C is aryl or heteroaryl;

each occurrence of R^C is independently halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, optionally substituted sulfonyl, $-OR^f$, $-SR^f$, $-N(R^f)_2$, $-NO_2$, or $-CN$;

c is 0, 1, 2, 3, or 4;

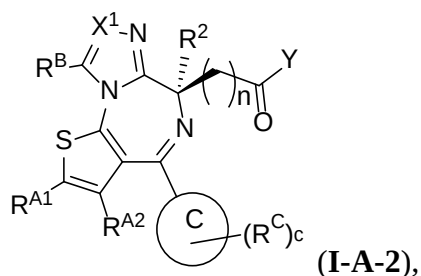
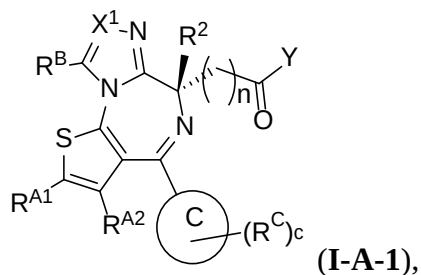
n is 0, 1, 2, 3, or 4;

R^2 is hydrogen, halogen, or optionally substituted alkyl; and

each occurrence of R^f is independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl, optionally substituted heterocyclyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted acyl, optionally substituted sulfonyl, an oxygen

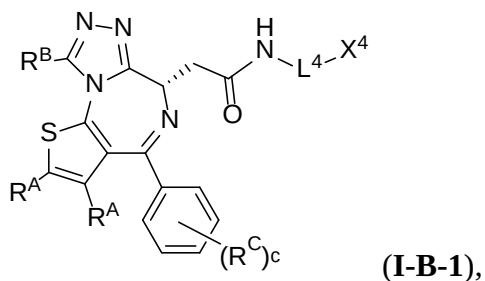
protecting group, or a nitrogen protecting group, or two R^f are joined to form an optionally substituted heterocyclic or optionally substituted heteroaryl ring.

2. The compound of claim 1, wherein the compound is of Formulae **(I-A-1)** or **(I-A-2)**:



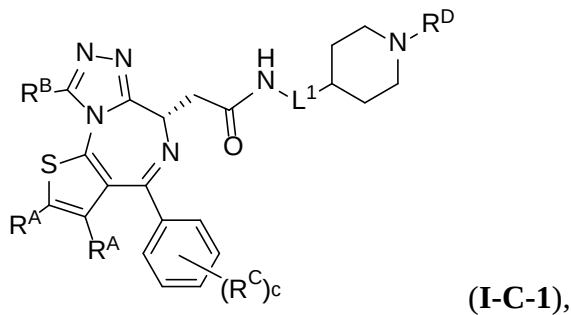
or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof.

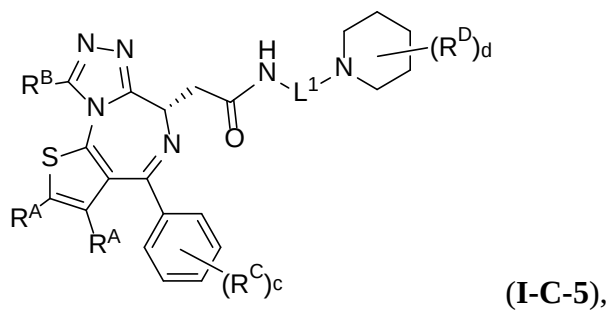
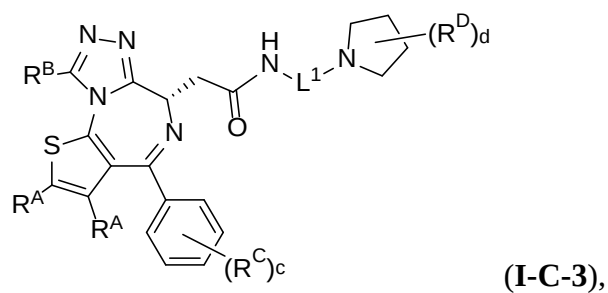
3. The compound of claim 1, wherein the compound is of Formula **(I-B-1)**:



or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof.

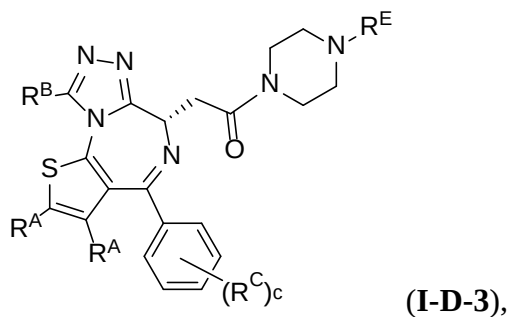
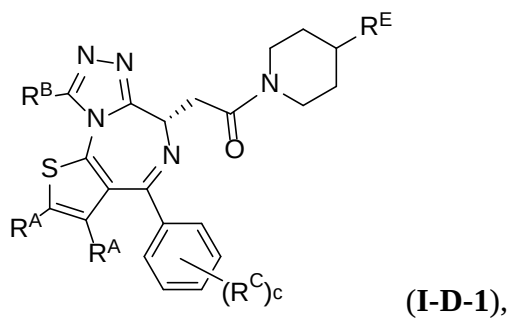
4. The compound of claim 1, wherein the compound is of Formulae **(I-C-1)**, **(I-C-3)**, or **(I-C-5)**:





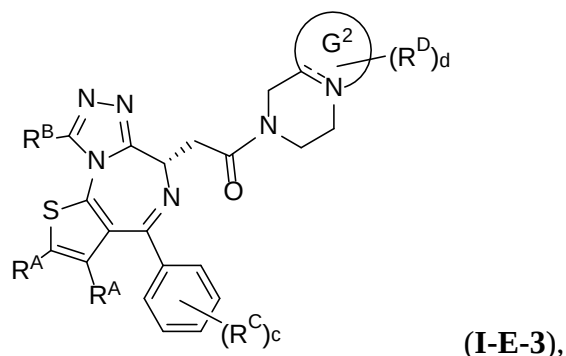
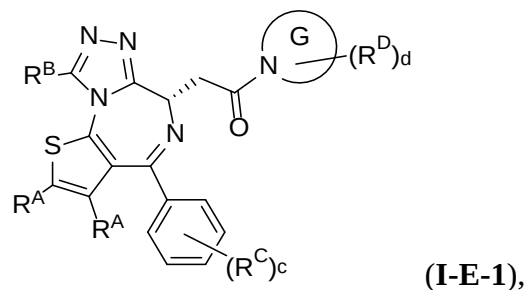
or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof.

5. The compound of claim 1, wherein the compound is of Formulae **(I-D-1)** or **(I-D-3)**:



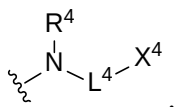
or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof.

6. The compound of claim 1, wherein the compound is of Formulae (I-E-1) or (I-E-3):



or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, wherein Ring G² is heterocyclic or heteroaryl, and $\equiv$ is a single or double bond.

7. The compound of any one of claims 1 or 2, or a pharmaceutically acceptable salt thereof, wherein Y is of formula:

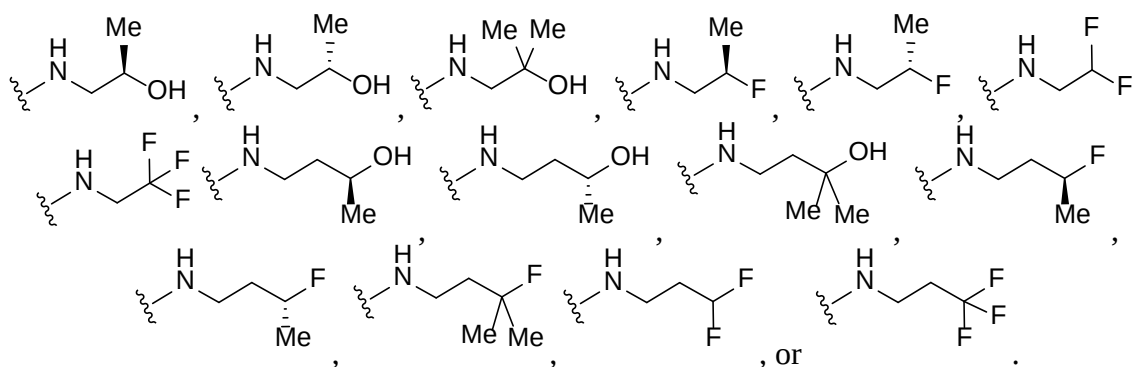


8. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein L⁴ is unsubstituted branched C₁₋₆ alkylene.

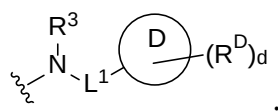
9. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein L⁴ is C₁₋₆ alkyl, substituted with halogen.

10. The compound of any one of claims 7-9, or a pharmaceutically acceptable salt thereof, wherein X⁴ is -OH or -F.

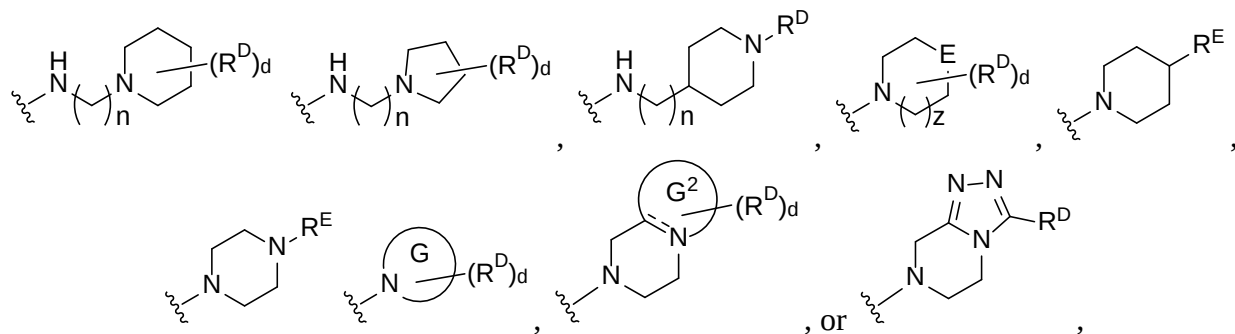
11. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein Y is of formula:



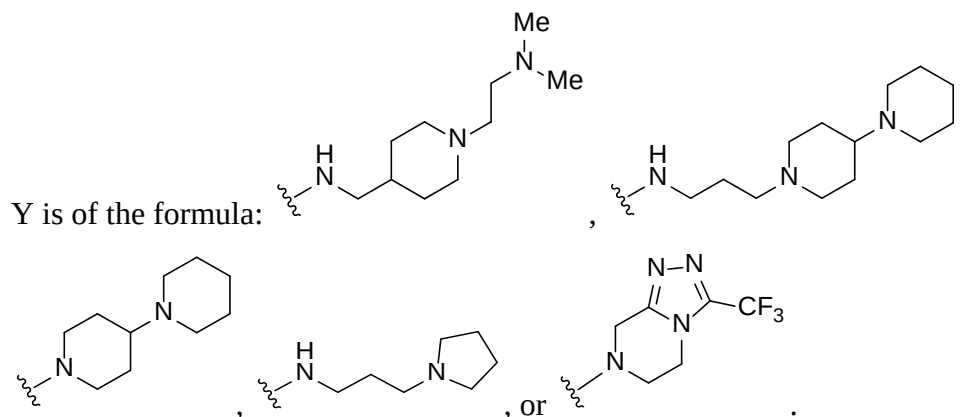
12. The compound of any one of claims 1 or 2, or a pharmaceutically acceptable salt thereof, wherein Y is of formula:



13. The compound of claim 12, or a pharmaceutically acceptable salt thereof, wherein Y is of formula:



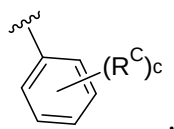
wherein Ring G^2 is heterocyclic or heteroaryl, and $\equiv$ is a single or double bond, and wherein n is 1, 2, 3, 4, 5, or 6; or



14. The compound of any one of claims 1-13, or a pharmaceutically acceptable salt thereof, wherein both R^{A1} and R^{A2} are hydrogen or optionally substituted C_{1-6} alkyl.

15. The compound of claim 14, or a pharmaceutically acceptable salt thereof, wherein both R^{A1} and R^{A2} are unsubstituted C_{1-6} alkyl.

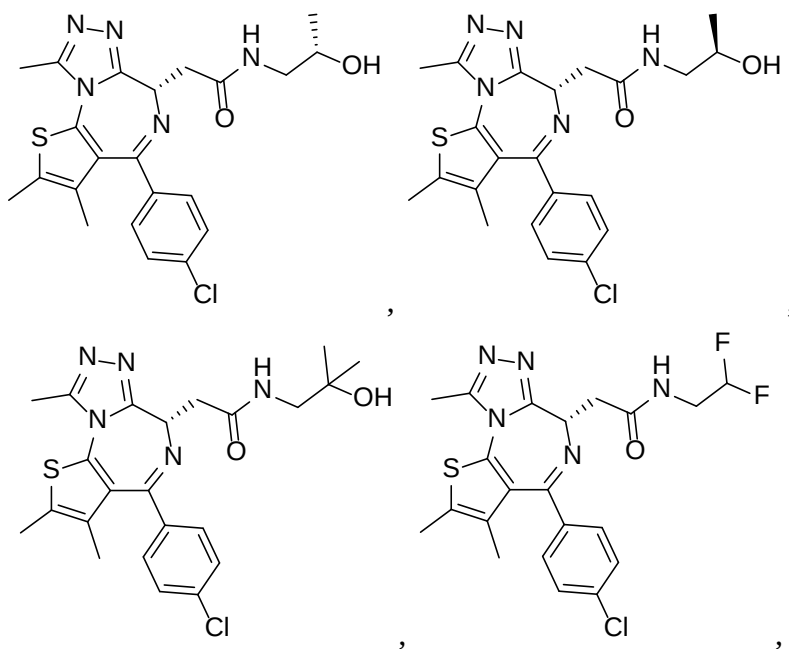
16. The compound of any one of claims 1-15, or a pharmaceutically acceptable salt thereof, wherein Ring C is of formula:

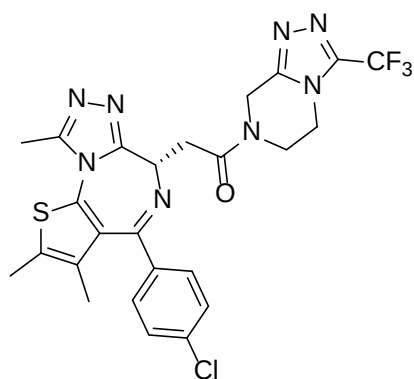
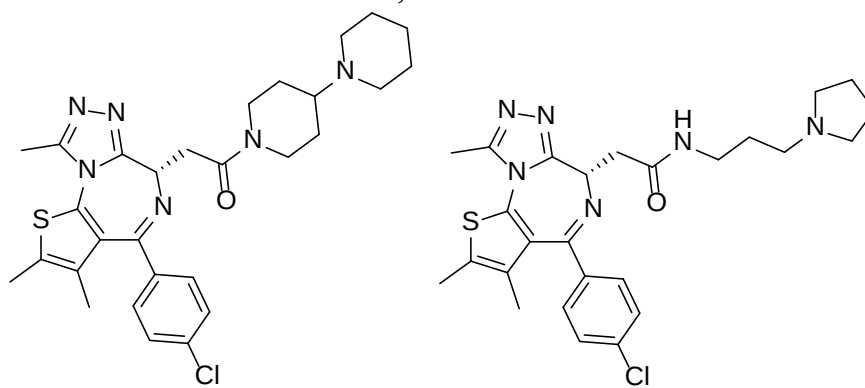
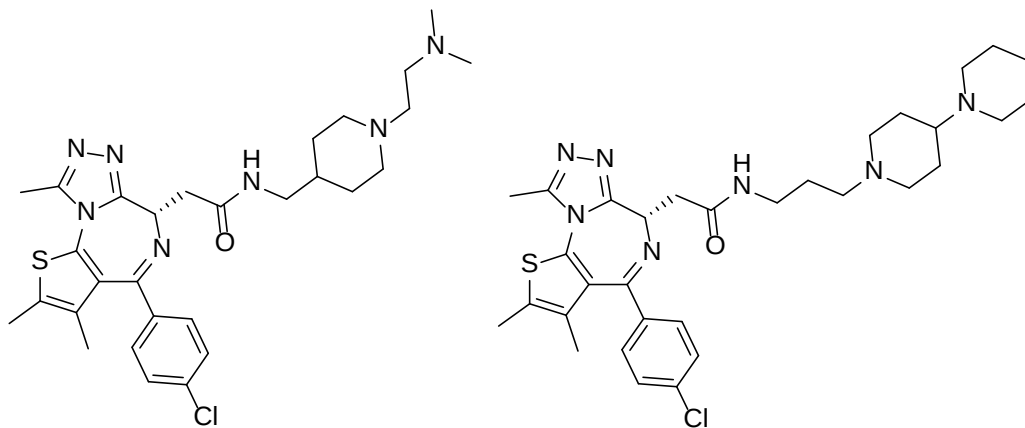


17. The compound of any one of claims 1-16, or a pharmaceutically acceptable salt thereof, wherein X^1 is N.

18. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein both R^{A1} and R^{A2} are hydrogen or optionally substituted C_{1-6} alkyl.

19. The compound of claim 1, wherein the compound is of formula:





20. A pharmaceutical composition comprising a compound of any one of claims 1-19, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, and a pharmaceutically acceptable excipient.

21. A compound of any one of claims 1-19, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, or a pharmaceutical composition of claim 20, for use in therapy.

22. A compound of any one of claims 1-19, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, or a pharmaceutical composition of claim 20,

for use in the treatment of:

a disease associated with a bromodomain-containing protein, a disease associated with a bromodomain, a disease associated with aberrant activity of a bromodomain-containing protein, a disease associated with aberrant activity of a bromodomain, a disease associated with increased activity of a bromodomain-containing protein, a disease associated with increased activity of a bromodomain, a proliferative disease, cancer, lung cancer, multiple myeloma, neuroblastoma, colon cancer, testicular cancer, ovarian cancer, NUT midline carcinoma, mixed-lineage leukemia (MLL), prostate cancer, medulloblastoma, acute non-lymphocytic leukemia (ANLL), a benign neoplasm, a disease associated with pathological angiogenesis, an inflammatory disease, a cardiovascular disease, an autoimmune disease, a viral infection, a fibrotic disease, a neurological disease, a metabolic disease, an endocrine disease, rheumatoid arthritis, sepsis, atherogenesis, atherosclerosis, infection caused by human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), infection caused by human papillomavirus (HPV), infection caused by hepatitis C virus (HCV), infection caused by herpes simplex virus (HSV), infection caused by Ebola virus, severe acute respiratory syndrome (SARS), influenza, radiation poisoning, scleroderma, idiopathic pulmonary fibrosis, a graft-versus-host disease (GVHD), diabetes, obesity, Type II diabetes or gestational diabetes;

for use in male contraception;

for use in the inhibition of:

the activity of a bromodomain-containing protein, the activity of a bromodomain, the binding of a bromodomain of a bromodomain-containing protein to an acetyl-lysine residue of a second protein, the binding of a bromodomain of a bromodomain-containing protein to an acetyl-

lysine residue of a histone, the expression of a gene that is regulated by a bromodomain-containing protein;

for use in inducing apoptosis in a cell; or

for use in inducing G1 arrest in a cell.

23. Use of a compound of any one of claims 1-19, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, or a pharmaceutical composition of claim 20, in the manufacture of a medicament for the treatment of:

a disease associated with a bromodomain-containing protein, a disease associated with a bromodomain, a disease associated with aberrant activity of a bromodomain-containing protein, a disease associated with aberrant activity of a bromodomain, a disease associated with increased activity of a bromodomain-containing protein, a disease associated with increased activity of a bromodomain, a proliferative disease, cancer, lung cancer, multiple myeloma, neuroblastoma, colon cancer, testicular cancer, ovarian cancer, NUT midline carcinoma, mixed-lineage leukemia (MLL), prostate cancer, medulloblastoma, acute non-lymphocytic leukemia (ANLL), a benign neoplasm, a disease associated with pathological angiogenesis, an inflammatory disease, a cardiovascular disease, an autoimmune disease, a viral infection, a fibrotic disease, a neurological disease, a metabolic disease, an endocrine disease, rheumatoid arthritis, sepsis, atherogenesis, atherosclerosis, infection caused by human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), infection caused by human papillomavirus (HPV), infection caused by hepatitis C virus (HCV), infection caused by herpes simplex virus (HSV), infection caused by Ebola virus, severe acute respiratory syndrome (SARS), influenza, radiation poisoning, scleroderma, idiopathic pulmonary fibrosis, a graft-versus-host disease (GVHD), diabetes, obesity, Type II diabetes or gestational diabetes.

24. A method of:

inhibiting the activity of a bromodomain-containing protein, inhibiting the activity of a bromodomain, inhibiting the binding of a bromodomain or a bromodomain-containing protein to

an acetyl-lysine residue of a second protein or a histone, inhibiting the expression of a gene that is regulated by a bromodomain-containing protein; or

inducing apoptosis or G1 arrest in a cell

in a biological sample, the method comprising contacting the biological sample with an effective amount of a compound of any one of claims 1-19, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, or a pharmaceutical composition of claim 20.

25. The compound of claim 22, or the use of claim 23, or the method of claim 24, wherein the bromodomain-containing protein is a bromo and extra terminal (BET) protein, bromodomain-containing protein 2 (BRD2), bromodomain-containing protein 3 (BRD3), or bromodomain-containing protein 4 (BRD4), a TBP (TATA box binding protein)-associated factor protein (TAF), TAF1 or TAF1L, CREB-binding protein (CBP), or E1A binding protein p300 (EP300).