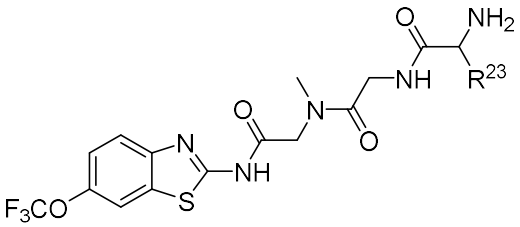
CLAIMS

WHAT IS CLAIMED IS:

1. A compound having formula :



including enantiomers, diasteroemers, hydrates, solvates, pharmaceutically acceptable salts, and complexes thereof, wherein:

R^{23} is selected from the group consisting H, CH_3, CH_2CH_3, $CH_2CH_2CH_3$, CH_2CCH, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2OH, CH_2OCH_2Ph, $CH_2CH_2OCH_2Ph$, $CH(OH)CH_3$, CH_2Ph, CH_2(cyclohexyl), CH_2(4-OH-Ph), $(CH_2)_4NH_2$, $(CH_2)_3NHC(NH_2)NH$, CH_2(3-indole), CH_2(5-imidazole), CH_2CO_2H, $CH_2CH_2CO_2H$, CH_2CONH_2, and $CH_2CH_2CONH_2$;

2. A compound according to claim 1selected from the group consisting of:

(S)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(R)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(S)-2-amino-3-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)butanamide;

(R)-2-amino-3-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)butanamide;

(S)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)-3-phenylpropanamide;

(R)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)-3-phenylpropanamide;

(S)-2-amino-4-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)pentanamide;

(R)-2-amino-4-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)pentanamide;

(S)-2-amino-3-hydroxy-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(R)-2-amino-3-hydroxy-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

2-(2-aminoacetamido)-N-methyl-N-(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)acetamide;

or a pharmaceutically acceptable form thereof.

3. A composition comprising an effective amount of at least one compound according to claim 1 and at least one excipient.

4. ~~A method for treating or preventing cancer, said method comprising administering to a subject an effective amount of at~~ At least one compound according to claim 1 for use in treating or preventing cancer.

5. The ~~method~~ compound for use of claim 4, wherein the at least one compound is to be administered in a composition further comprising at least one excipient.

6. The ~~method~~ compound for use of claim 5, wherein the at least one compound is to be administered in a composition further comprising an anticancer agent.

7. The ~~method~~ compound for use of claim 6 wherein the anticancer agent is selected from the group consisting of Vemurafenib, Ipilimumab, Masitinib, Sorafenib, Lenalidomide, Oblimersen, Trametinib, Dabrafenib, RO5185426, Veliparib, Bosentan, YM155, CNTO 95, CR011-vcMMAE, CY503, Lenvatinib, Avastin, Tasidotin, Ramucirumab, IPI-504, Tasisulam, KW2871, MPC-6827, RAF265, Dovitinib, Everolimus, MEK162, BKM120, Nilotinib, Reolysin, 825A, Tremelimumab, PI-88, Elesclomol, STA9090, and Allovectin-7.

8. The ~~method~~ compound for use of claim 6 wherein the cancer is selected from the group consisting of melanoma, nonmelanoma skin cancer, skin cancer, ovarian cancer, cervical cancer, breast cancer, prostate cancer, testicular cancer, lung cancer, renal cancer, colorectal cancer, brain cancer including glioma and glioblastoma, and leukemia.

9. ~~A method for treating or preventing a non-cancerous disease in which riluzole is clinically relevant said method comprising administering to a subject an effective amount of at~~ At least one compound according to claim 1 for use in treating or preventing a non-cancerous disease in which riluzole is clinically relevant.

10. The ~~method~~ compound for use of claim 9, wherein the at least one compound is to be administered in a composition further comprising at least one excipient.

11. The ~~method~~ compound for use of claim 9 wherein the disease in which riluzole is clinically relevant is selected from the group consisting of amyotrophic lateral sclerosis, bipolar disorder, treatment resistant and major depression, general anxiety disorder, panic disorder, social anxiety, mood disorders, cognitive disorders, dementia, agitation, apathy, psychoses, post-traumatic stress disorders, irritability, disinhibition, learning disorders, memory loss, personality disorders, bipolar disorders, Rett syndrome, eating disorders, conduct disorder, neurodegenerative disorders, pain disorders, supranuclear palsy, frontotemporal dementia,

frontotemporal lobar degeneration, delirium, Alzheimer's disease, mild cognitive impairment, mild cognitive impairment due to Alzheimer's disease, drug addiction, tinnitus, mental retardation, obsessive-compulsive disorder, spinal muscular atrophy, radiation therapy, multiple sclerosis, chronic cerebellar ataxia, cervical spondylotic myelopathy, spinal cord injury, hereditary cerebellar ataxia, Tourette syndrome, autism spectrum disorder, schizophrenia, fragile X syndrome, Parkinson's Disease and Huntington's disease.

12. ~~A method of attenuating presynaptic glutamate release said method comprising administering to a subject an effective amount of at~~ At least one compound according to claim 1 for use in attenuating presynaptic glutamate release.

13. ~~A method of normalizing, enhancing, or potentiating the uptake of glutamate by glia, said method comprising administering to a subject an effective amount of at~~ At least one compound according to claim 1 for use in normalizing, enhancing, or potentiating the uptake of glutamate by glia.

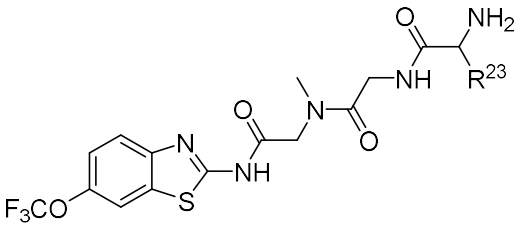
14. ~~A method for treating or preventing disease in which riluzole is clinically relevant, said method comprising administering to a subject an effective amount of at~~ At least one compound according to claim 1 for use in treating or preventing disease in which riluzole is clinically relevant, and wherein the compound is to be administered with ~~and~~ a serotonin reuptake inhibitor.

15. The ~~method~~ compound for use of claim14 wherein the disease in which riluzole is clinically relevant is selected from the group consisting of amyotrophic lateral sclerosis, bipolar disorder, treatment resistant and major depression, general anxiety disorder, panic disorder, social anxiety, mood disorders, cognitive disorders, dementia, agitation, apathy, psychoses, post-traumatic stress disorders, irritability, disinhibition, learning disorders, memory loss, personality disorders, bipolar disorders, Rett syndrome, eating disorders, conduct disorder, neurodegenerative disorders, pain disorders, supranuclear palsy, frontotemporal dementia, frontotemporal lobar degeneration, delirium, Alzheimer's disease, mild cognitive impairment, mild cognitive impairment due to Alzheimer's disease, drug addiction, tinnitus, mental retardation, obsessive-compulsive disorder, spinal muscular atrophy, radiation therapy, multiple sclerosis, chronic cerebellar ataxia, hereditary spinocerebellar ataxia, spinocerebellar ataxia, sporadic ataxia, episodic ataxia, Friedreich Ataxia, Multisystem Atrophy, ataxia associated with Anti-GAD antibodies target and onconeural antigen, essential tremor, cervical spondylotic myelopathy, spinal cord injury, hereditary cerebellar ataxia, Tourette syndrome, autism spectrum disorder, schizophrenia, fragile X syndrome, Parkinson's Disease, Progressive Supranuclear Palsy, Dementia with Lewy Bodies and Huntington's disease.

CLAIMS

WHAT IS CLAIMED IS:

1. A compound having formula :



including enantiomers, diasteroemers, hydrates, solvates, pharmaceutically acceptable salts, and complexes thereof, wherein:

R^{23} is selected from the group consisting H, CH_3, CH_2CH_3, $CH_2CH_2CH_3$, CH_2CCH, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2OH, CH_2OCH_2Ph, $CH_2CH_2OCH_2Ph$, $CH(OH)CH_3$, CH_2Ph, CH_2(cyclohexyl), CH_2(4-OH-Ph), $(CH_2)_4NH_2$, $(CH_2)_3NHC(NH_2)NH$, CH_2(3-indole), CH_2(5-imidazole), CH_2CO_2H, $CH_2CH_2CO_2H$, CH_2CONH_2, and $CH_2CH_2CONH_2$;

2. A compound according to claim 1selected from the group consisting of:

(S)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(R)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(S)-2-amino-3-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)butanamide;

(R)-2-amino-3-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)butanamide;

(S)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)-3-phenylpropanamide;

(R)-2-amino-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)-3-phenylpropanamide;

(S)-2-amino-4-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)pentanamide;

(R)-2-amino-4-methyl-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)pentanamide;

(S)-2-amino-3-hydroxy-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

(R)-2-amino-3-hydroxy-N-(2-(methyl(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)amino)-2-oxoethyl)propanamide;

2-(2-aminoacetamido)-N-methyl-N-(2-oxo-2-((6-(trifluoromethoxy)benzo[d]thiazol-2-yl)amino)ethyl)acetamide;

or a pharmaceutically acceptable form thereof.

3. A composition comprising an effective amount of at least one compound according to claim 1 and at least one excipient.

4. At least one compound according to claim 1 for use in treating or preventing cancer.

5. The compound for use of claim 4, wherein the at least one compound is to be administered in a composition further comprising at least one excipient.

6. The compound for use of claim 5, wherein the at least one compound is to be administered in a composition further comprising an anticancer agent.

7. The compound for use of claim 6 wherein the anticancer agent is selected from the group consisting of Vemurafenib, Ipilimumab, Masitinib, Sorafenib, Lenalidomide, Oblimersen, Trametinib, Dabrafenib, RO5185426, Veliparib, Bosentan, YM155, CNTO 95, CR011-vcMMAE, CY503, Lenvatinib, Avastin, Tasidotin, Ramucirumab, IPI-504, Tasisulam, KW2871, MPC-6827, RAF265, Dovitinib, Everolimus, MEK162, BKM120, Nilotinib, Reolysin, 825A, Tremelimumab, PI-88, Elesclomol, STA9090, and Allovectin-7.

8. The compound for use of claim 6 wherein the cancer is selected from the group consisting of melanoma, nonmelanoma skin cancer, skin cancer, ovarian cancer, cervical cancer, breast cancer, prostate cancer, testicular cancer, lung cancer, renal cancer, colorectal cancer, brain cancer including glioma and glioblastoma, and leukemia.

9. At least one compound according to claim 1 for use in treating or preventing a non-cancerous disease in which riluzole is clinically relevant.

10. The compound for use of claim 9, wherein the at least one compound is to be administered in a composition further comprising at least one excipient.

11. The compound for use of claim 9 wherein the disease in which riluzole is clinically relevant is selected from the group consisting of amyotrophic lateral sclerosis, bipolar disorder, treatment resistant and major depression, general anxiety disorder, panic disorder, social anxiety, mood disorders, cognitive disorders, dementia, agitation, apathy, psychoses, post-traumatic stress disorders, irritability, disinhibition, learning disorders, memory loss, personality disorders, bipolar disorders, Rett syndrome, eating disorders, conduct disorder, neurodegenerative disorders, pain disorders, supranuclear palsy, frontotemporal dementia, frontotemporal lobar degeneration, delirium, Alzheimer's disease, mild cognitive impairment, mild cognitive impairment due to Alzheimer’s disease, drug addiction, tinnitus, mental retardation, obsessive-compulsive disorder, spinal muscular atrophy, radiation therapy, multiple sclerosis, chronic cerebellar ataxia, cervical spondylotic myelopathy, spinal cord injury, hereditary cerebellar

ataxia, Tourette syndrome, autism spectrum disorder, schizophrenia, fragile X syndrome, Parkinson's Disease and Huntington's disease.

12. At least one compound according to claim 1 for use in attenuating presynaptic glutamate release.

13. At least one compound according to claim 1 for use in normalizing, enhancing, or potentiating the uptake of glutamate by glia.

14. At least one compound according to claim 1 for use in treating or preventing disease in which riluzole is clinically relevant, and wherein the compound is to be administered with a serotonin reuptake inhibitor.

15. The compound for use of claim14 wherein the disease in which riluzole is clinically relevant is selected from the group consisting of amyotrophic lateral sclerosis, bipolar disorder, treatment resistant and major depression, general anxiety disorder, panic disorder, social anxiety, mood disorders, cognitive disorders, dementia, agitation, apathy, psychoses, post-traumatic stress disorders, irritability, disinhibition, learning disorders, memory loss, personality disorders, bipolar disorders, Rett syndrome, eating disorders, conduct disorder, neurodegenerative disorders, pain disorders, supranuclear palsy, frontotemporal dementia, frontotemporal lobar degeneration, delirium, Alzheimer's disease, mild cognitive impairment, mild cognitive impairment due to Alzheimer's disease, drug addiction, tinnitus, mental retardation, obsessive-compulsive disorder, spinal muscular atrophy, radiation therapy, multiple sclerosis, chronic cerebellar ataxia, hereditary spinocerebellar ataxia, spinocerebellar ataxia, sporadic ataxia, episodic ataxia, Friedreich Ataxia, Multisystem Atrophy, ataxia associated with Anti-GAD antibodies target and onconeural antigen, essential tremor, cervical spondylotic myelopathy, spinal cord injury, hereditary cerebellar ataxia, Tourette syndrome, autism spectrum disorder, schizophrenia, fragile X syndrome, Parkinson's Disease, Progressive Supranuclear Palsy, Dementia with Lewy Bodies and Huntington's disease.