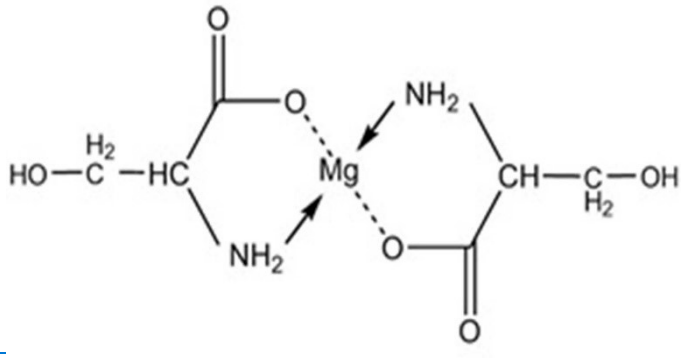
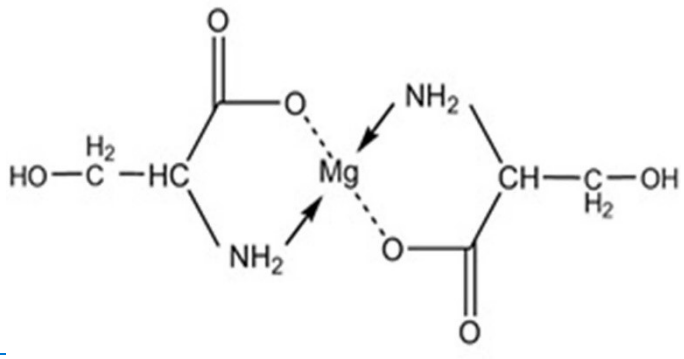
CLAIMS

1. A compound of the following Formula (I) or a pharmaceutically acceptable salt, solvate, hydrate or isomer of the compound:



(I).

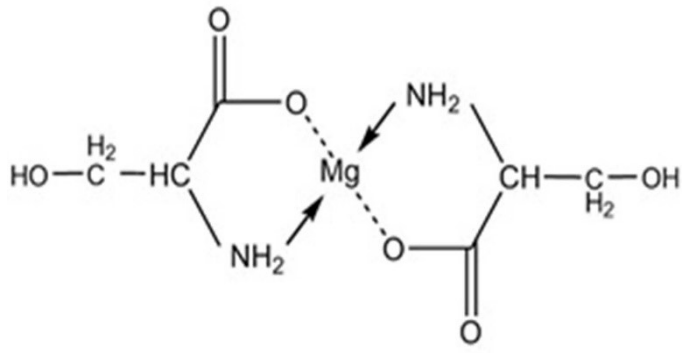
2. A method of producing a compound of the following Formula (I) by reacting MgO with L-serine:



(I).

3. The method of claim 2, wherein the reaction is performed at a temperature of 70 to 80°C.

~~4. A method of producing a compound of the following Formula (I) by reacting MgH_2 with L-serine:~~

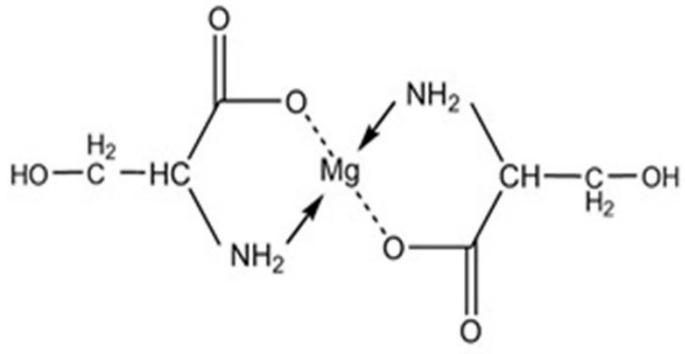


~~(I).~~

~~5. The method of claim 4, wherein the reaction is performed at room temperature.~~

~~6. The method of claim 4, wherein the reaction is performed at a temperature of 70 to 80°C.~~

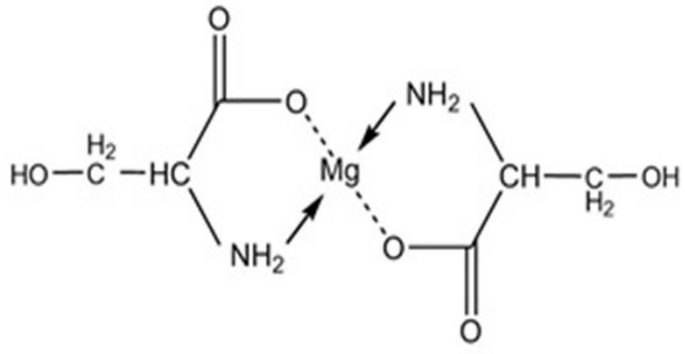
17. A pharmaceutical composition for use in preventing or treating central nervous system diseases, the pharmaceutical composition containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient:



(I)

~~8. The pharmaceutical composition of claim 7,~~ wherein the central nervous system diseases are selected from the group consisting of cognitive disorder, intellectual disability, microcephaly, epilepsy, neurodevelopmental disorder, dementia, autism spectrum disorder, Down's syndrome, Rett's syndrome, fragile X syndrome, Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis.

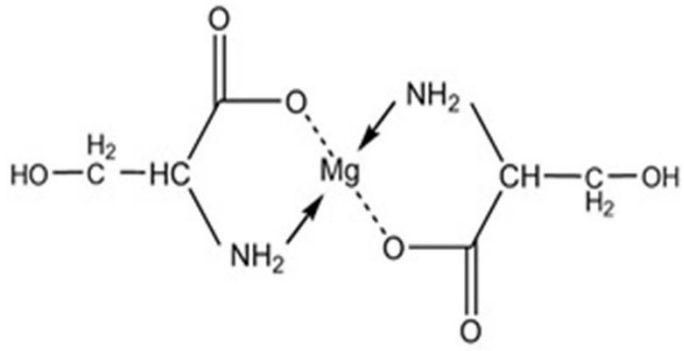
~~9~~2. A health functional food for use in preventing or alleviating central nervous system diseases, the health functional food containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient:



(I)

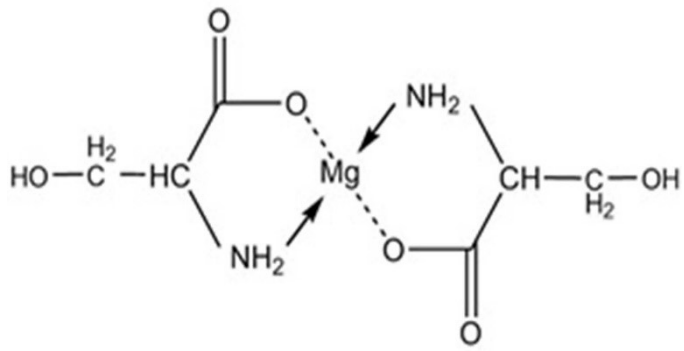
~~10. The health functional food of claim 9,~~ wherein the central nervous system diseases are selected from the group consisting of cognitive disorder, intellectual disability, microcephaly, epilepsy, neurodevelopmental disorder, dementia, autism spectrum disorder, Down's syndrome, Rett's syndrome, fragile X syndrome, Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis.

~~11~~3. A feed additive composition comprising a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient:



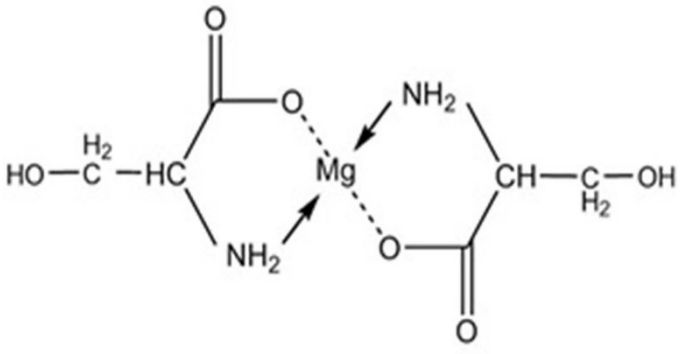
(I).

~~12~~4. A reagent composition for use in inhibiting neuronal cell death, the reagent composition containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof:



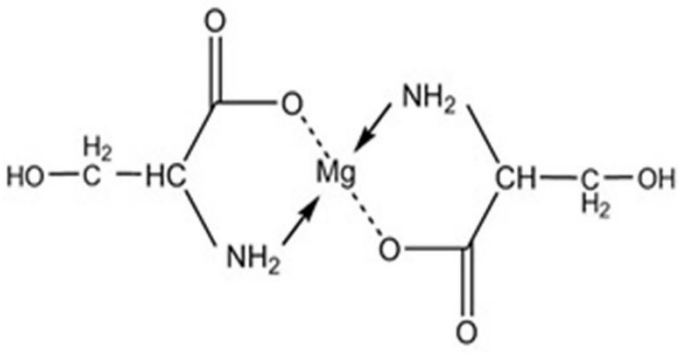
(I)~~.~~.

~~13~~5. A method for inhibiting neuronal cell death, the method comprising treating neuronal cells with a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof *in vitro*:



(I).

~~14~~6. Use of a pharmaceutical composition containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient in the manufacture of a medicament for the prevention or treatment of central nervous system diseases:

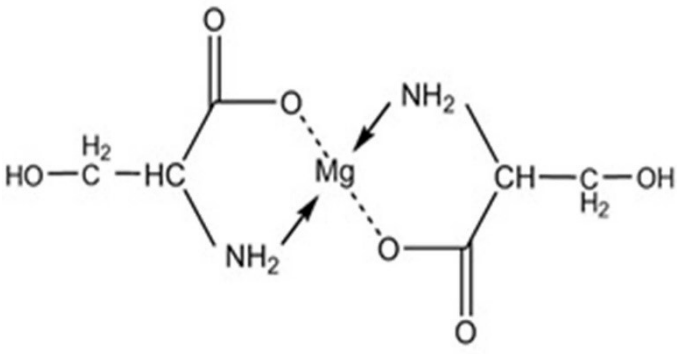


(I).

~~15~~7. The use of claim ~~14~~6, wherein the central nervous system diseases are selected from the group

consisting of cognitive disorder, intellectual disability, microcephaly, epilepsy, neurodevelopmental disorder, dementia, autism spectrum disorder, Down’s syndrome, Rett's syndrome, fragile X syndrome, Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis.

~~16~~8. Use of a health functional food containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient in the manufacture of a medicament for the prevention or alleviation of central nervous diseases:

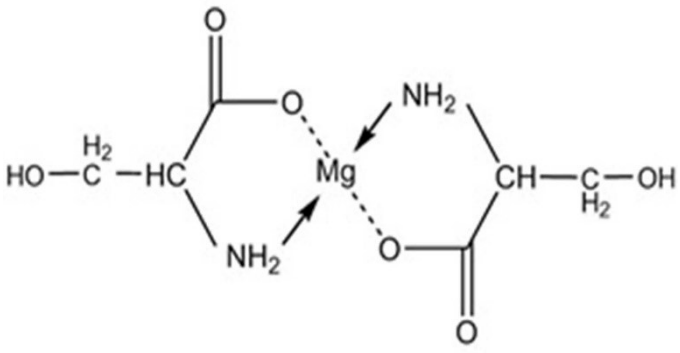


(I).

~~17~~9. The use of claim ~~16~~8, wherein the central nervous system diseases are selected from the group consisting of cognitive disorder, intellectual disability, microcephaly, epilepsy, neurodevelopmental disorder,

dementia, autism spectrum disorder, Down’s syndrome, Rett's syndrome, fragile X syndrome, Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis.

~~18~~10. Use of a reagent composition containing a compound of the following Formula (I) or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the inhibition of neuronal cell death:



(I).