Claims

1. An application of salidroside in the preparation of drugs, characterized by comprising: the drug is used for the prevention and/or treatment of spinocerebellar ataxia type 3 (SCA3), and the neuroprotective effect is manifested as delaying or improving neuronal damage caused by mutant ataxin-3 protein extended by polyglutamine.

2. The application of salidroside in the preparation of drugs according to claim 1, characterized in that the salidroside exerts neuroprotective effects by reducing the level of soluble mutant ataxin-3 protein in the SCA3 cell model.

3. The application of salidroside in the preparation of drugs according to any one of claims 1, characterized in that the working concentration of the active ingredient salidroside in the drug is 0.01 μ M to 1 μ M.

4. The application of salidroside in the preparation of drugs according to any one of claims 1-3, characterized in that the administration time of the drug is 24 hours or longer.

5. The application of salidroside in the preparation of drugs according to any one of claims 1-4, characterized in that the drug has no toxic effect on SCA3 cell models of HEK293T human embryonic kidney cells and SK-N-SH nerve cells overexpressing ataxin-3.

6. The application of salidroside in the preparation of drugs according to any one of claims 1-5, characterized in that the drug comprises any one of tablets, capsules, injections, sustained-release formulations, and transdermal absorption formulations.

7. The application of salidroside in the preparation of drugs according to claim 1, characterized in that the drug uses salidroside as the active ingredient and is supplemented with pharmaceutically acceptable excipients or carriers, wherein the excipients include any one or more of microcrystalline cellulose, magnesium stearate, hydroxypropyl methylcellulose, lactose, and starch; the carrier comprises any one or more of hyaluronic acid, polylactic acid hydroxyacetic acid copolymer, physiological saline, phosphate buffer solution, and cholesterol.

8. A pharmaceutical composition comprising an effective dose of salidroside and a pharmaceutically acceptable carrier for the prevention and/or treatment of spinocerebellar ataxia type 3 (SCA3), wherein the effective dose refers to a dose that can achieve a salidroside concentration of 0.01 μ M to 1 μ M in the target tissue or blood when used.