

ABSTRACT

A solid catalyst component for polymerization of olefins, a catalyst for polymerization of olefins, and a method for producing an olefin polymer are provided.

- 5 The solid catalyst component (A) is obtained by causing a solid component (a) containing magnesium, titanium, and a halogen atom to come in contact with an organosilicon compound (b) shown by the formula, $[\text{CH}_2=\text{CH}-(\text{CH}_2)_n]_q\text{SiR}^1_{4-q}$. A catalyst for polymerization of olefins (B) is formed from an organoaluminum compound shown by the formula $\text{R}^2_r\text{AlQ}_{3-r}$. A process for producing an olefin polymer comprises
- 10 polymerizing olefins in the presence of the catalyst. By using the catalyst, a polymer which has high catalyst activity and stereoregularity and is excellent in maintaining activity can be obtained in a high yield.