

ABSTRACT

A catalyst for polymerization of olefins formed from (A) a solid catalyst component containing magnesium, titanium, halogen, and an electron donor compound, (B) an organoaluminum compound shown by the formula, $R_p^6AlQ_{3-p}$, and (C) an aminosilane compound shown by the formula, $R_n^3Si(NR^4R^5)_{4-n}$; and a process for producing a catalyst for polymerization of olefins in the presence of the catalyst are provided. A novel aminosilane compound, a catalyst component for polymerization of olefins having a high catalytic activity, capable of producing polymers with high stereoregularity in a high yield, and exhibiting an excellent hydrogen response, a catalyst, and a process for producing olefin polymers using the catalyst are provided.