ABSTRACT

The present invention provides a catalyst to convert hydrocarbons, which comprises a zeolite containing substantially no proton and having an intermediate pore diameter, a molar ratio of SiO_2 to Al_2O_3 of at least 20 and one or more metals belonging to Group Ib of the Periodic Table. Further, the present invention provides a method to catalytically convert hydrocarbons by using the above catalyst. By means of the present invention, there can be provided a stable catalyst for conversion of hydrocarbons, which is capable of obtaining olefins containing ethylene as a main component and monocyclic aromatic hydrocarbons with good balance and a high yield, and which is hardly deteriorated by steam having a high temperature.