CLAIMS

1. An alumina sintered body used for a component of a process chamber of a semiconductor manufacturing apparatus comprising 0.01 to 1.0 mass% of one or more types selected from Ta, Nb, and V in terms of oxide thereof.

2. The alumina sintered body according to claim 1, further comprising 0.01 to 1.0 mass% of Mg in terms of Mg oxide.

3. The alumina sintered body according to claim 1 or 2, further comprising 0.0014 to 0.01 mass% of Na in terms of oxide thereof, wherein $OX_{Na}/OX_0$ is 0.20 or less,

wherein the $OX_{Na}$ (mass%) is the amount of Na in terms of Na oxide and the $OX_0$ (mass%) is the amount of oxide of the one or more types selected from Ta, Nb, and V, in the alumina sintered body.

4. A method for manufacturing the alumina sintered body according to any of claims 1 to 3, the method comprising mixing raw material powder of alumina with raw material powder of one or more types selected from Ta, Nb, and V, granulizing the mixture, shaping the granules, and then sintering the shaped granules in atmosphere at a temperature ranging from 1575 to 1675°C.

5. A part for semiconductor manufacturing apparatus using the alumina sintered body according to any of claims 1 to 3.