

# Human APCDD1 Protein

Cat. No. APD-HM101

Description	
Source	Recombinant Human APCDD1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Leu27-His492.
Accession	Q8J025
Molecular Weight	The protein has a predicted MW of 54.4 kDa. Due to glycosylation, the protein migrates to 58-68 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per $\mu\text{g}$ by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

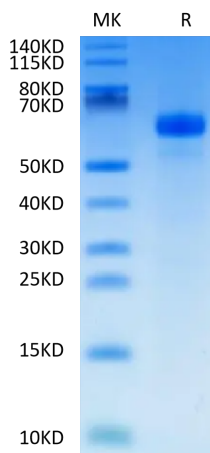
Formulation and Storage	
Formulation	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

**Background**

Adenomatosis polyposis coli downregulated 1 (APCDD1), a negative regulator of Wnt signaling, was examined to understand detailed mechanisms underlying Wnt signaling tooth development. In situ hybridization showed that Apcdd1 was expressed in the condensed mesenchyme at the bud stage, and in the inner enamel epithelium (IEE), including enamel knot (EK) at the cap stage. APCDD1 modulates the gene expression of Wnt- and EK-related signaling molecules at the cap stage of tooth development, and is involved in tooth cusp patterning by modulating the epithelial rearrangement in the IEE.

## Assay Data

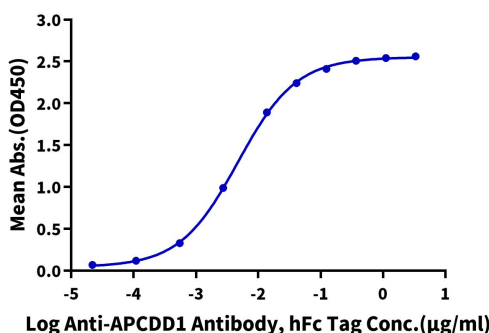
### Tris-Bis PAGE



Human APCDD1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

**Human APCDD1, His Tag ELISA**  
0.2 $\mu\text{g}$  Human APCDD1, His Tag Per Well



Immobilized Human APCDD1, His Tag at 2 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}/\text{well}$ ) on the plate. Dose response curve for Anti-APCDD1 Antibody, hFc Tag with the EC50 of 4.7ng/ml determined by ELISA.