

## Vacuolar Protein Sorting Protein 29

Human, VPS29

Expressed in *E.Coli*

Cat. No. CBCRY38

Lot. No. (See product label)

### BACKGROUND

VPS29 belongs to a group of genes coding for vacuolar protein sorting (VPS) proteins that, when functionally impaired, disrupt the efficient delivery of vacuolar hydrolases. The protein encoded by this gene, Vps29, is a component of a large multimeric complex, termed the retromer complex, which is involved in retrograde transport of proteins from endosomes to the trans-Golgi network. Vps29 may be involved in the formation of the inner shell of the retromer coat for retrograde vesicles leaving the prevacuolar compartment.

### MOLECULAR DESCRIPTION

**Protein classification:** cytoplasmic protein

**Structure Weight:** 20531.90 Da

**Polymer:** 1

**Molecule:** Vacuolar Protein Sorting Protein 29

**Chains:** A

**Type:** polypeptide (L)

**Chain Length:** 182 amino acids

### CRYSTAL INFORMATION

**PDB ID:** [1W24](#)

**MMDB ID:** [32322](#)

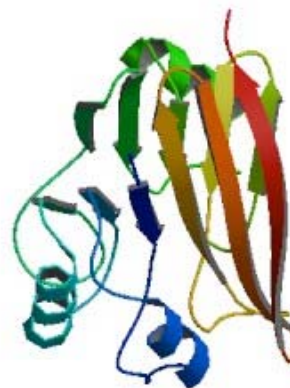
**Source:** E.Coli

**Method:** X-Ray Diffraction

**Resolution:** 2.10 Å

### FOR RESEARCH USE ONLY

### CRYSTAL STRUCTURE



### GENE INFORMATION

**Gene Name:** [VPS29](#)

**Synonyms:** DC15; DC7; DKFZp564F0223; FLJ20492; PEP11; retromer protein; vacuolar protein sorting 29; vacuolar sorting protein VPS29/PEP11; x 007 protein; EC 3.1.3.3; hVPS29; vesicle protein sorting 29

**UniProt ID:** [Q9UBQ0](#)

**GeneID:** [51699](#)

**Chromosome Location:** 12q24

**Function:** zinc ion binding; hydrolase activity; metal ion binding

### PRIMARY CITATION

Wang, D., Guo, M., Liang, Z., Fan, J., Zhu, Z., Zang, J., Zhu, Z., Li, X., Teng, M., Niu, L., Dong, Y., Liu, P. (2005) Crystal Structure of Human Vacuolar Protein Sorting Protein 29 Reveals a Phosphodiesterase/Nuclease-Like Fold and Two Protein-Protein Interaction Sites. *J.Biol.Chem.* 280: 22962