

**Product Name:** AREL1 (436-823)

**Alternate Names:** KIAA0317, FLR

**Product Code:** TE3-065

**FOR RESEARCH USE ONLY (RUO)**

### Verified Applications / Usage

*In vitro*, recombinant AREL1 accepts activated ubiquitin from E2 conjugating enzymes UBE2D1 or UBE2L3, in a reaction that also requires Ubiquitin Activating Enzyme 1 (an E1). The charged E3 demonstrates strong autoubiquitylation in the absence of added substrates. Appropriate enzyme concentrations are specific to the application.

### Physical Characteristics

**Species:** Human

**Predicted MW (kDa):** 58 kDa

**Source:** *E. coli* BL21(DE3) A.I.

**Purity:** 95 %

**Tag:** N-His<sub>6</sub>-SUMO

**Formulation:** 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

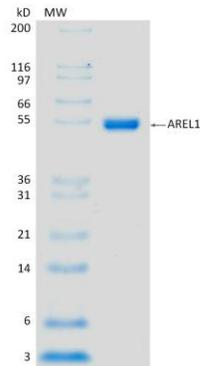
**Shipping:** The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

**Stability/Storage:** Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

## Quality Assurance

### Purity & SDS-PAGE

**Protein ID:** Apoptosis-resistant E3 ubiquitin protein ligase 1



2 µg AREL1 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

### Activity Assay

Verified in Polyubiquitin Chain Synthesis Assay.

## Background

### Description

Recombinant human AREL1 is a HECT-type E3 that generates mainly K11- and K33-linked polyubiquitin chains. This recombinant protein consists of the AREL1 HECT domain (aa 436-823) and an N-terminal His<sub>6</sub>-SUMO tag.

**Accession Number:** O15033

**Entrez Gene ID:** AREL1

## Protein Sequence

```
MGGSHHHHHHGSLEVLVFQGPMSMSDQEAKPSTEDLGDKKEGEYIKLKVIGQDSSEIHFVKVMT  
THLKKLKESYCQRQGVPMNSLRFLFEGQRIADNHTPKELGMEEEDVIEVYQEQTGGSETFQDK  
VNFFQREL RQVHMKRPHSKVTLKVS RHALLESSLKATRNF S I SDWSKNFEVVFQDEEALDWGG  
PRREWFELICKALFDTTNQLFTRFSDNNQALVHPNPNRPAHLRLKMYEFAGRLVGKCLYESSL  
GGAYKQLVRRARFTRSFLAQIIIGLRMHYKYFETDDPEFYKSKVCFILNNDMSEMELVFAEEKYN  
KSGQLDKVVELMTGGAQTPVTNANKIFYLNLLAQYRLASQVKEEVEHFLKGLNELVPENLLAI  
FDENELELLMCGTGDISVSDFKAHAVVVGGSWHFREKVMRWFWTVVSSLTQEELARLLQFTTG  
SSQLPPGGFAALCPSFQIIAAPHSTLPTAHTCFNQQLCLPTYDSYEEVHRMLQLAISEGCEGF  
GML
```