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## TPS1 (M) Antibody, Rabbit Polyclonal

**Cat#:** R3146-2

**Quantity:** 100 ul

**Predicted | Observed M.W.:** 106 kDa

**Lot#:** Refer to vial

**Application:** WB

**Uniprot ID:** Q9SYM4

### **Background:**

Trehalose-6-phosphate synthase 1 (TPS1) is required for normal embryo development, vegetative growth and transition to flowering. TPS1 regulates embryo growth, cell wall deposition, starch and sucrose degradation, but not cell differentiation. TPS1 is also involved in the regulation of glucose sensing and signaling genes during plant development. A recent study demonstrated that the loss of TPS1 causes *Arabidopsis thaliana* to flower extremely late, even under otherwise inductive environmental conditions, suggesting that TPS1 is required for the timely initiation of flowering [Wahl V. et al., Science 339:704 (2013)].

### **Other Names:**

Alpha,alpha-trehalose-phosphate synthase [UDP-forming] 1, Trehalose-6-phosphate synthase 1, AtTPS1

### **Source and Purity:**

Rabbit polyclonal antibodies were produced by immunizing animals with a GST-fusion protein containing the middle region of *arabidopsis thaliana* TPS1 (At1g78580). Antibodies were purified by affinity purification using immunogen.

### **Storage Buffer and Condition:**

Supplied in 1 x PBS (pH 7.4), 100 ug/ml BSA, 40% Glycerol, 0.01% NaN<sub>3</sub>. Store at -20 °C. Stable for 6 months from date of receipt.

### **Species Specificity:**

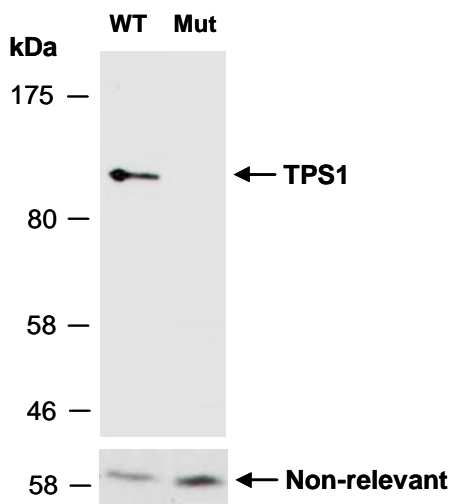
*Arabidopsis thaliana*

### **Tested Applications:**

WB: 1:1,000-1:3,000 (detect endogenous protein\*)

\*: The apparent protein size on WB may be different from the calculated M.W. due to modifications.

**Product Data:**



**Fig 1.** Western blot of equal amounts of protein extracts from WT or TPS1 deficient mutant (Mut) Arabidopsis; using anti-TPS1 (M) (R3146-2) at RT for 2 h. The same filter was re-probed with a non-relevant Ab for loading control.