SANTA CRUZ BIOTECHNOLOGY, INC.

FKF1 (aL-20): sc-12665

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Arabidopsis development is mediated by several environmental stimuli. Light plays an important role in many developmental processes, including photosynthesis, chloroplast biogenesis, leaf initiation, and floral induction. Several light sensitive proteins are thought to mediate the transition from vegetative to floral development in response to photoperiods. CONSTANS (CO) promotes flowering in response to long photoperiods. When CONSTANS is mutated, flowering is delayed during long photoperiods, but is not affected during short photoperiods. ZEITLUPE (ZTL) and FKF1 influence flowering by modulating the circadian clock in *Arabidopsis*.

REFERENCES

1. Chory, J. 1993. Out of darkness: mutants reveal pathways controlling light-regulated development in plants. Trends Genet. 9: 167-172.
2. Coupland, G., Igeno, M.I., Simon, R., Schaffer, R., Murtas, G., Reeves, P., Robson, F, Pineiro, M., Costa, M., Lee, K., and Suarez-Lopez, P. 1998. The regulation of flowering time by daylength in *Arabidopsis*. Symp. Soc. Exp. Biol. 51: 105-110.
3. Somers, D.E., Schultz, T.F., Milnamow, M., and Kay, S.A. 2000. ZEITLUPE encodes a novel clock-associated PAS protein from *Arabidopsis*. Cell 101: 319-329.
4. Onouchi, H., Igeno, M.I., Perilleux, C., Graves, K., and Coupland, G. 2000. Mutagenesis of plants overexpressing CONSTANS demonstrates novel interactions among *Arabidopsis* flowering-time genes. Plant Cell 12: 885-900.
5. Samach, A., Onouchi, H., Gold, S.E., Ditta, G.S., Schwarz-Sommer, Z., Yanofsky, M.F., and Coupland, G. 2000. Distinct roles of CONSTANS target genes in reproductive development of Arabidopsis. Science 288: 1613-1616.
6. Nelson, D.C., Lasswell, J., Rogg, L.E., Cohen, M.A., and Bartel, B. 2000. FKF1, a clock-controlled gene that regulates the transition to flowering in *Arabidopsis*. Cell 101: 331-340.

SOURCE

FKF1 (aL-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FKF1 of *Arabidopsis Thaliana* origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12665 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FKF1 (aL-20) is recommended for detection of FKF1 of *Arabidopsis Thaliana* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.