

Product no **AS15 3079****LCY | Lycopene beta-cyclase (chloroplastic)****Product information**

Immunogen	His-tagged, recombinant <i>Arabidopsis thaliana</i> LCY1 lycopene beta-cyclase, overexpressed in <i>E.coli</i> , UniProt:Q38933, TAIR: AT3G10230
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 µl of sterile water
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Additional information | This product can be sold with ProClin if requested

Application information

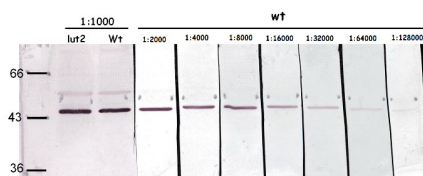
Recommended dilution | 1 : 1000 - 1 : 128 000 (WB)

Expected | apparent MW | 56 | 50 kDa

Confirmed reactivity | *Arabidopsis thaliana*

Predicted reactivity | *Adonis aestivalis* var. *palaestina*, *Bixa orellana*, *Brassica napus*, *Brassica rapa* subsp. *pekinensis*, *Camellia sinensis*, *Capsicum annuum*, *Carica papaya*, *Citrus maxima*, *Citrus sinensis*, *Chrysanthemum morifolium*, *Cucumis sativus*, *Cucurbita moschata*, *Daucus carota* subsp. *sativus*, *Diospyros kaki*, *Eriobotrya japonica*, *Erythranthe lewisii*, *Gentiana lutea*, *Glycine soja*, *Ipomoea* sp. *Kenyan*, *Lycium ruthenicum*, *Medicago truncatula*, *Morus notabilis*, *Narcissus pseudonarcissus*, *Nicotiana tabacum*, *Oryza sativa*, *Populus trichocarpa*, *Ricinus communis*, *Rosa rugosa*, *Salicornia europaea*, *Sandersonia aurantiaca*, *Solanum lycopersicum*, *Taraxacum officinale*, *Theobroma cacao*, *Vitis vinifera*
Species of your interest not listed? [Contact us](#)

Not reactive in | No confirmed exceptions from predicted reactivity are currently known

application example

Total protein from *Arabidopsis thaliana* leaves, wild type and Lut2 (*Arabidopsis thaliana* mutant devoid of lycopene-epsilon-cyclase, an enzyme at the same branching point catalyzed by lycopene-beta-cyclase (LCY)) corresponding to 0.5 µg of chlorophylls, were extracted with loading buffer (10% glycerol, 62.5 mM Tris pH 6.8, 2% SDS, 5% -mercaptoethanol) and denatured at 100°C (boiling water) for 1 min.

Proteins were separated on 12% SDS-PAGE (Laemly) and blotted 1h to PVDF using tank transfer. Blots were blocked with blocking solution (PBS 1X, 0.2% w/v Tween, 5% powder milk) for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody diluted in blocking solution, at a dilution of from 1:1000 to 1:128000 for 1h at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed 3 times for 10 min in blocking solution at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG alkaline phosphatase conjugated, diluted to 1:30 000 in blocking buffer for 1h at RT with agitation. The blot was washed 2 times for 10 min in blocking solution and once with PBS 1X solution for 10 min, then developed in developing buffer NBT/BCIP by manual agitation.

Courtesy of Stefano Cazzaniga, University of Verona, Italy

Mutant devoid of LCY is not available (not viable) and using lut2 mutant allowed to test if the antibody discriminates the two different cyclases.