Agrisera

product AS12 2581

CesA7 (IRX3) | Cellulose synthase A catalytic subunit 7 [UDP-forming]

product information

Background	**CesA7 (IRX3)** is a catalytic subunit of xylem-specific cellulose synthase, involved in secondary cell wall biosynthesis - cellulose synthase trerminal complexes. It interacts with CESA4 and CESA8 which is required for a functyional complex and localization in secondary cell wall deposition sites. Occurs in secondary cell wall developing tissues such as xylems and interfascicular regions in young plants stems and flowers. Not expressed in leaves, roots and shoots. Synonymes: Protein IRREGULAR XYLEM 3, IRX3, Protein FRAGILE FIBER 5.
Immunogen	recombinant *Arabidopsis thaliana* IRX3 fragment,UniProt: Q9SWW6, TAIR: At5g17420
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 tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
Tested applications	Western blot (WB)
Related products	AS12 2582	CesA4 (IRX5)	Cellulose synthase A catalytic subunit 4 [UDP-forming], rabbit antibody
	AS12 2580	CesA8 (IRX1)	Cellulose synthase A catalytic subunit 8 [UDP-forming], rabbit antibody
	Plant protein extraction buffer
	Secondary antibodies
Additional information	This antibody is detecting both, recombinant and edogenous CesA7 (IRX3) protein.

Application information

Recommended dilution	1 : 1000 (WB)
Expected | apparent MW	115.7 kDa
Confirmed reactivity	*Arabidopsis thaliana, Solanum lycopersicum*
Predicted reactivity	*Brassica napus, Eucalyptus grandis, Nicotiana tabacum, Populus sp.*
Not reactive in	No confirmed exceptions from predicted reactivity are currently known.
Additional information	This product can be sold containing ProClin if requested
Selected references	Tsuchiya et al. (2015). Distribution of XTH, expansin, and secondary-wall-related CesA in floral and fruit abscission zones during fruit development in tomato (Solanum lycopersicum). Front Plant Sci. 2015 May 15;6:323. doi: 10.3389/fpls.2015.00323.

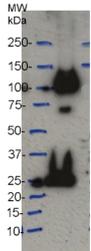# Agrisera

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application example

500 mg of Col-0 WT *Arabidopsis thaliana* stem powder extracted by boiling in 2 mL of 3% SDS loading buffer + 100 mM DTT at 95C for 10 min. Extract was spun at max speed to remove debris and supernatant was taken as crude extract. 25 µL of this was loaded on a 4-15% gel run for 50 min, 150v. . Blots were blocked with 5 % milk for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 500 over night at 4°C with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, AS09 602 from Agrisera) diluted to 1:5000 in for 2h at RT with agitation. The blot was washed as above and developed for 5 min with Pierce SuperSignal West Pico kit according to the manufacturer's instructions. Exposure time was 10 seconds.

Courtesy of Dr. Manoj Kumar, University of Manchester, UK