

Anti-Potassium channel AKT2/3 antibody

Catalog: PHY2451A

Product Information

Description: Background:

Synonyms:

Rabbit polyclonal antibody

AKT2 is a photosynthate- and light-dependent inward rectifying potassium channel with unique gating properties that are regulated by phosphorylation. Expressed in guard cell protoplasts and in the phloem and xylem of aerial portions of the plant. The channel can coassemble with another K+ channel, KAT1, in vitro. In guard cells, AKT2/3 is responsible for the Ca2+ sensitivity of the K+ uptake channel. In the phloem, it regulates the sucrose/H+ symporters via the phloem potential. AKT2 belongs to the Shaker family K+ channels which include the following groups based on phylogenetic analysis (FEBS Letters (2007) 581: 2357): I (inward rectifying channel): AKT1 (AT2G26650), AKT5 (AT4G32500) and SPIK (also known as AKT6, AT2G25600); II (inward rectifying channel): KAT1 (AT5G46240) and KAT2 (AT4G18290); III (weakly inward rectifying channel): AKT2 (AT4G22200); IV (regulatory subunit involved in inwardly rectifying conductance formation): KAT3 (also known as AtKC1, AT4G32650); V (outward rectifying channel): SKOR (AT3G02850) and GORK (AT5G37500). AKT2, AKT2/3, AKT3, KT2/3, POTASSIUM TRANSPORT 2/3

KLH-conjugated synthetic peptide (16 aa from Central section) derived from Immunogen: Arabidopsis thaliana AKT2 (AT4G22200). Form: Lyophilized Quantity: 150 µg Purification: Immunogen affinity purified Reconstitution: Reconstitution with 150 µl of 0.01 M sterile PBS. "Note: please spin tube briefly prior to opening it to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tube". Stability & Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Storage: 12 months from date of receipt, -20 to -70° C as supplied. 6 months, -20 to -70°C under sterile conditions after reconstitution. 1 month, 2 to 8°C under sterile conditions after reconstitution. Shipping: The product is shipped at 4°C. Upon receipt, store it immediately at the



temperature recommended above.

Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000)
	Note: Optimal dilutions/concentrations should be determined by the
	end user.
Expected / apparent MW:	91 kDa
Confirmed Reactivity:	Coming soon
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for
	immunization is 80-99% homologues with the sequence in Brassica
	napus, Brassica rapa, Vitis vinifera, Populus trichocarpa, Nicotiana
	tabacum, Gossypium raimondii.
	For more species homologues information, please contact tech
	support at <u>tech@phytoab.com</u> .



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