

Online Resource 1. List of previous rodent studies related to potassium load and WNK-SPAK-NCC cascade

	rodent strains	K administration	anion	duration	NCC	SPAK	WNK4
van der Lubbe [1]	Sprague-Dawley rat	5% K diet / low Na + high K diet	n.d.	8 days	tNCC ↓ pNCC ↓ (n.s.)	pSPAK ↑	WNK4 (protein) ↑
Rengarajan [2]	Sprague-Dawley rat	2% K diet / 150 mM K i.v.	Cl ⁻	3 h ^{*1}	pNCC ↓	pSPAK ↓ (n.s.) SPAK-FL ↓ (n.s.)	n.d.
Castañeda-Bueno [3]	C57BL/6 mouse	5% K diet	citrate	4 days	pNCC ↑	pSPAK → pSPAK-KS ↑	n.d.
Vitzthum [4]	C57BL/6 mouse	5% K diet	citrate	10 days	mRNA → pNCC ↑ (n.s.)	mRNA → protein ↑ (n.s.)	mRNA → protein →
Shoda [5]	C57BL/6 mouse	1.7% K oral gavage	Cl ⁻ citrate gluconate	15 min	pNCC ↓	pSPAK →	protein →

*1, after overnight fasting free access to a high K diet. n.d.: no data; n.s.: not significant; i.v.: intravenous; pNCC: phosphorylated NCC; pSPAK: phosphorylated SPAK; SPAK-FL: SPAK-full length; pSPAK-KS: phosphorylated SPAK-kidney specific; tNCC: total NCC; K⁺: potassium; Cl⁻: chloride.

References

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- [5] W. Shoda *et al.*, "Calcineurin inhibitors block sodium-chloride cotransporter dephosphorylation in response to high potassium intake," *Kidney Int.*, vol. 91, no. 2, pp. 402–411, Feb. 2017.