

LRRK2 Phosphorylates Novel Tau Epitopes and Promotes Tauopathy

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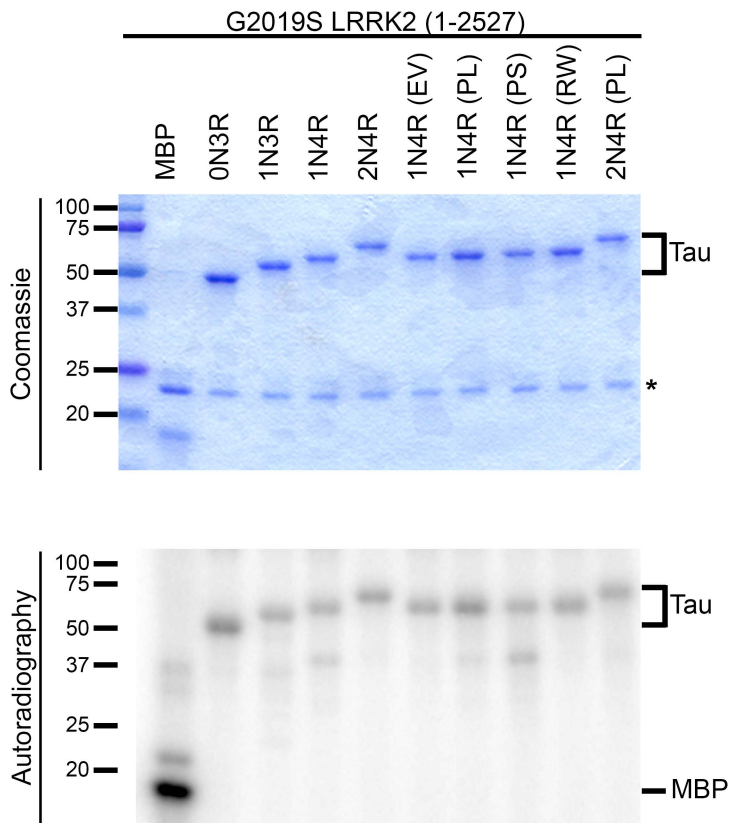
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Abbreviated title: LRRK2 phosphorylates tau

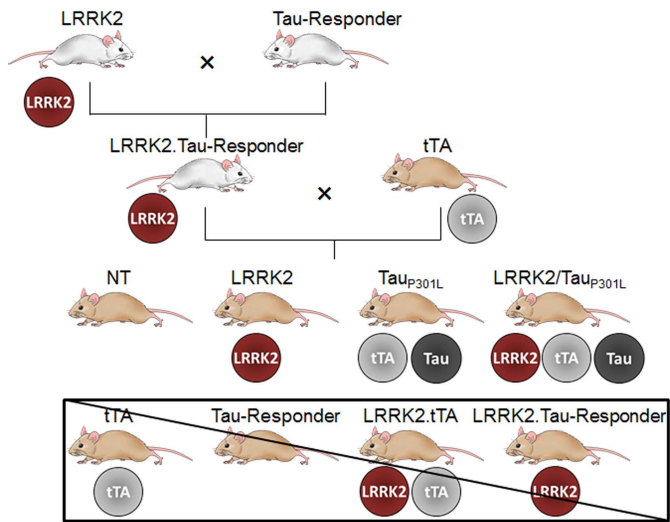
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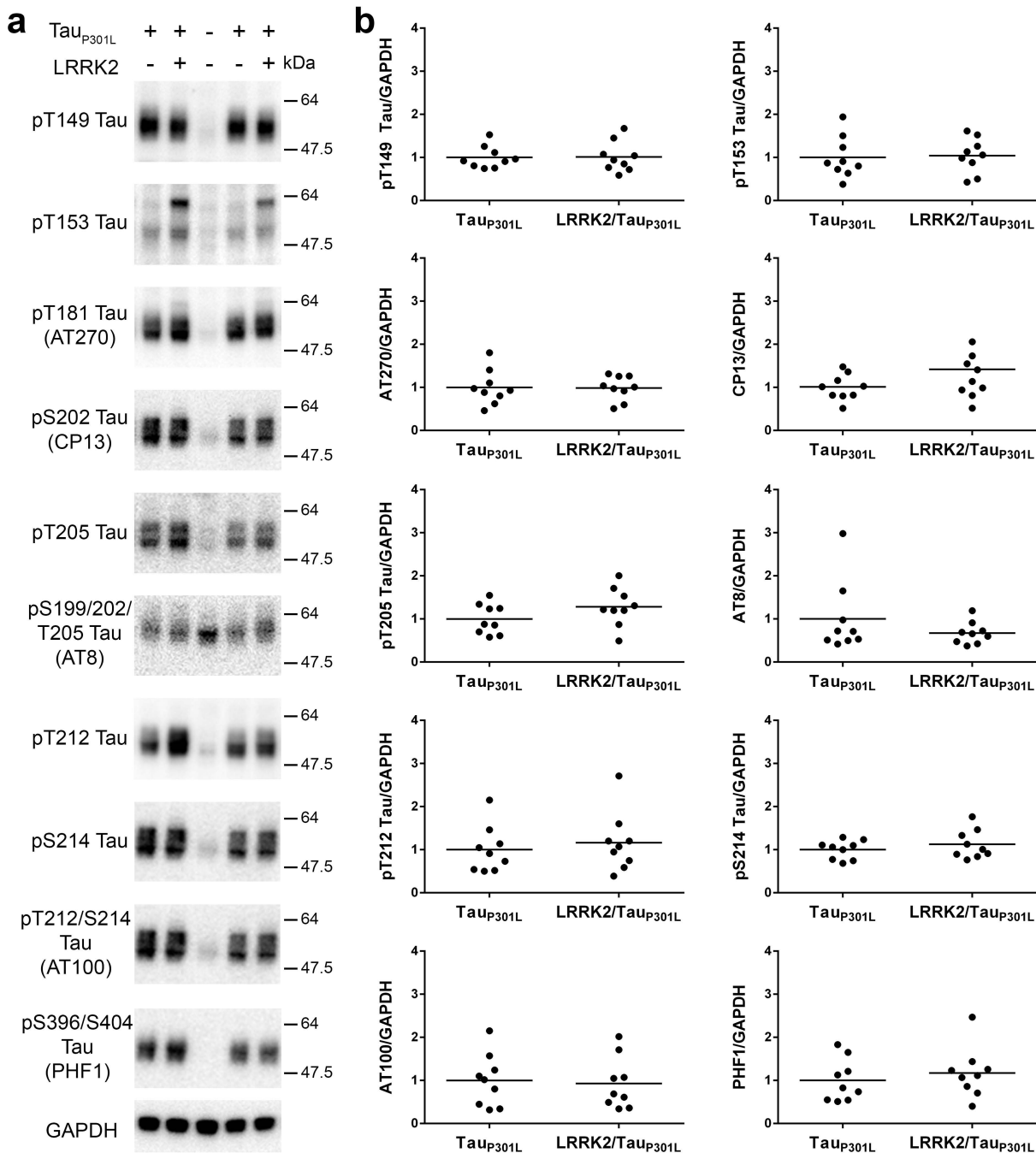
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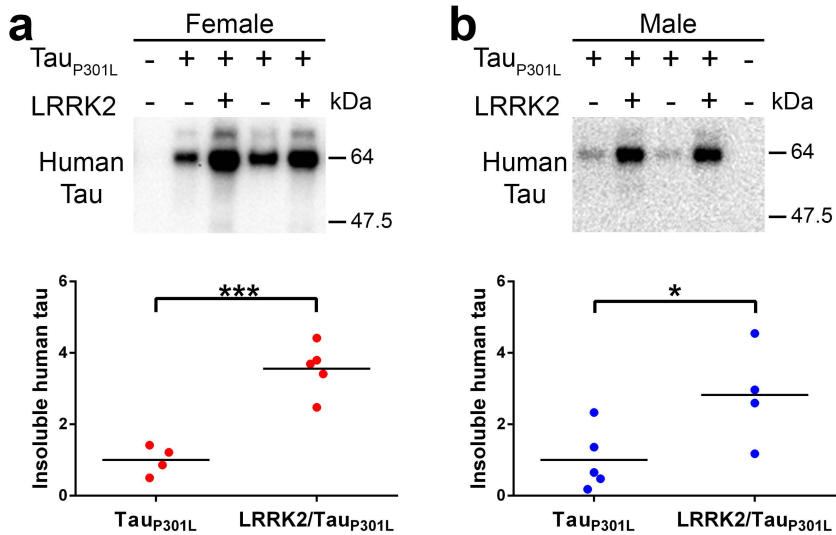
Bailey et al Supplemental Fig. 1



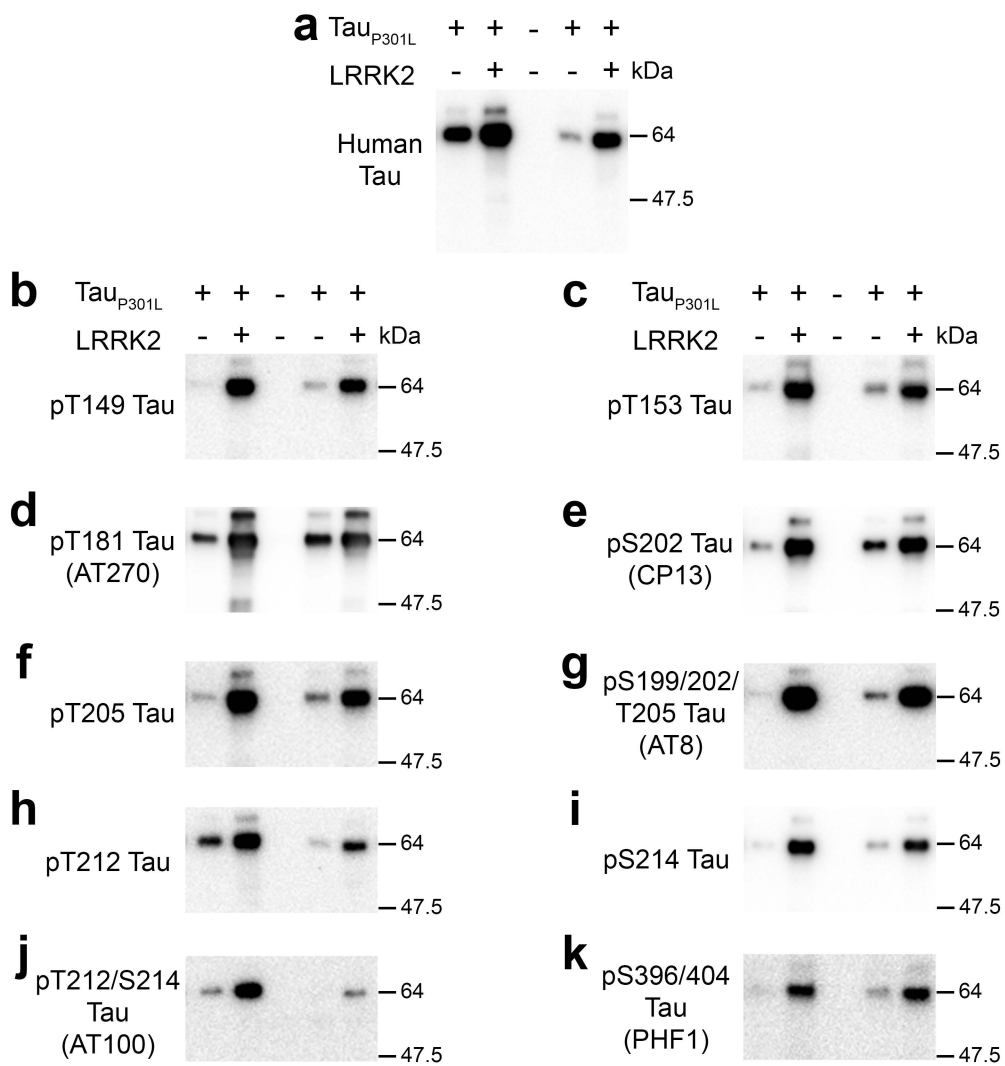
Bailey et al Supplemental Fig. 2



Bailey et al Supplemental Fig. 3



Bailey et al Supplemental Fig. 4



Bailey et al Supplemental Fig. 5

Supplemental Table 1A. Tau residues phosphorylated *in vitro* by LRRK2

Residue	% Phosphorylation
T30	5.3
T135	0.5
T149	16.8
T153	13.2
T169	47.1
T175	8.7
T181	6.1
T205	23.3
S210	9.1
T212	3.8
T217	11.1
T231	12.8
S237	2.3
T245	9.4
S258	3.4
T263	15.8
S324	8.0
S356	2.2
T361	2.9
T373	1.5
T377	11.1
T386	3.7
Y394	3.6
T403	5.0
S435	2.0

Supplemental Table 1B. Tau residues potentially phosphorylated <i>in vitro</i> by LRRK2	
Residue	
T30	
T17	
S184	
S185	
S208	
T220	
S238	
S262	
S352	
S413	

Supplemental Table 2. Synthetic tau peptide list	
Peptide	Amino Acid Coverage
Tau-A	KKAKGADGKTKIATPRGAAPPGQK
Tau-B	REPKKVAVVRTPPKSPSSAKSRL
Tau-C	QKGQANATRIPAKTPPAPKTPPSSG
Tau-D	SGYSSPGSPGTPGSRSRTPSLPT
Tau-E	SSAKSRLQTAPVPMPDLK
Tau-F	DLKNVKSKIGSTENLKHQ
Tau-G	GQVEVKSEKLDK
Tau-H	FKDRVQSKIGSLDN
Tau-I	DRVQSKIGSLDNITHVPGGGNKKIE
Tau-J	QSKIGSLDNITHVPGGG

Supplemental Table 2 Synthetic tau peptide sequences. Red = residues that were identified by mass spectrometry as LRRK2 phosphorylation targets.