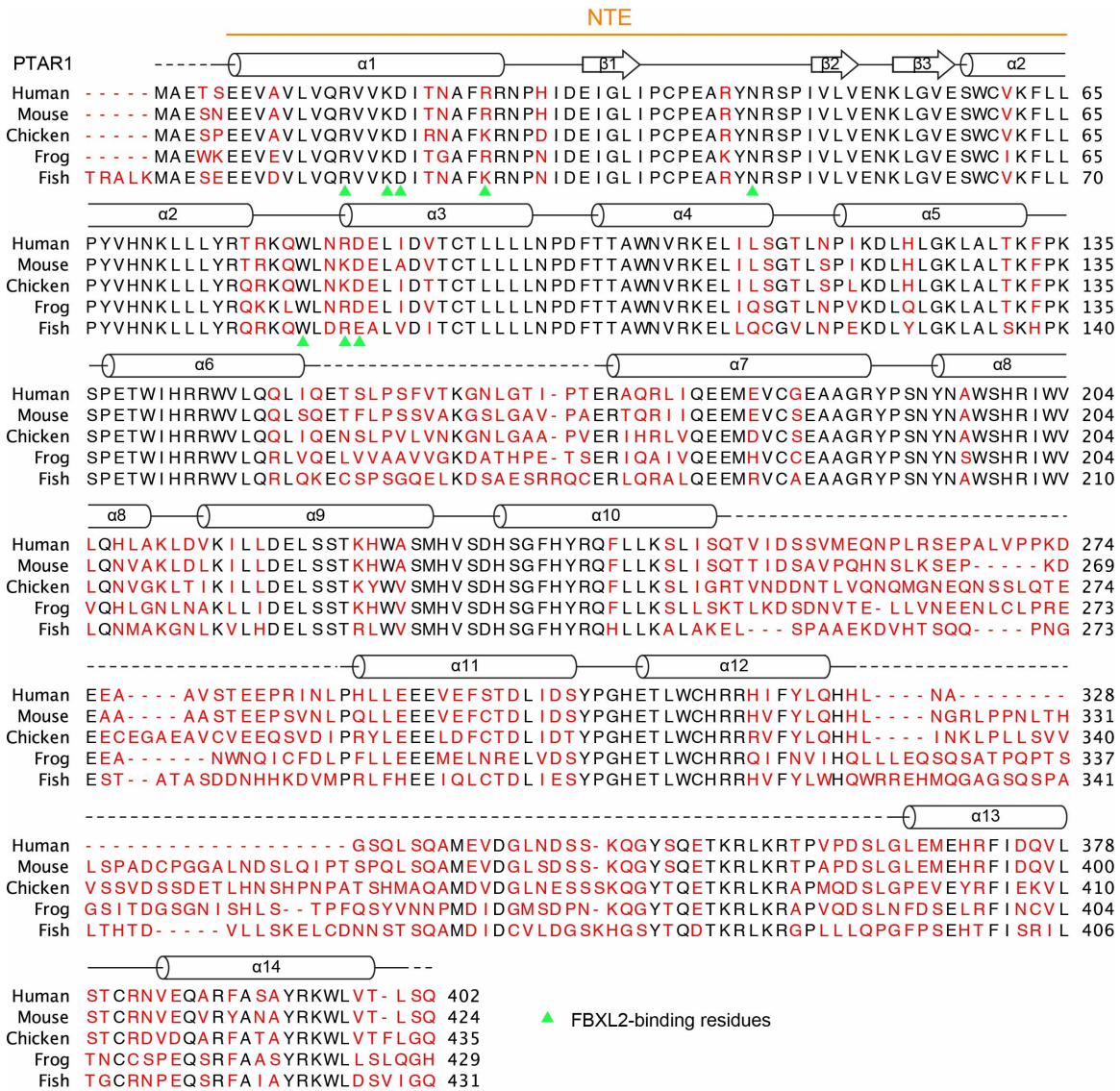


Supplementary Note 1. Sequence alignment and structural elements of FBXL2.

Alignment and secondary structure assignments of FBXL2 orthologs from human (*Homo sapiens*), mouse (*Mus musculus*), chicken (*Gallus gallus*), frog (*Xenopus tropicalis*), and fish (*Danio rerio*). Secondary structure elements including α -helices and β -strands are indicated as cylinders and arrows, respectively. Dashed lines represent regions of the protein that are disordered in the crystal. The F-box motif helices are labeled green, and the CVIL motif is boxed. Strictly conserved residues are colored black. Critical residues that participate in the interactions with PTAR1 are indicated by green arrows, and conserved residues following Phe400 that could contact PTAR1 are indicated by black dots.



Supplementary Note 2. Sequence alignment and structural elements of PTAR1.

Alignment and secondary structure assignments of PTAR1 orthologs from human (*Homo sapiens*), mouse (*Mus musculus*), chicken (*Gallus gallus*), frog (*Xenopus tropicalis*), and fish (*Danio rerio*). Secondary structure elements including α -helices and β -strands are indicated as cylinders and arrows, respectively. Dashed lines represent regions of the protein that are disordered in the crystal. Strictly conserved residues are colored black, and critical residues that participate in the interactions with FBXL2 are indicated by green arrows.