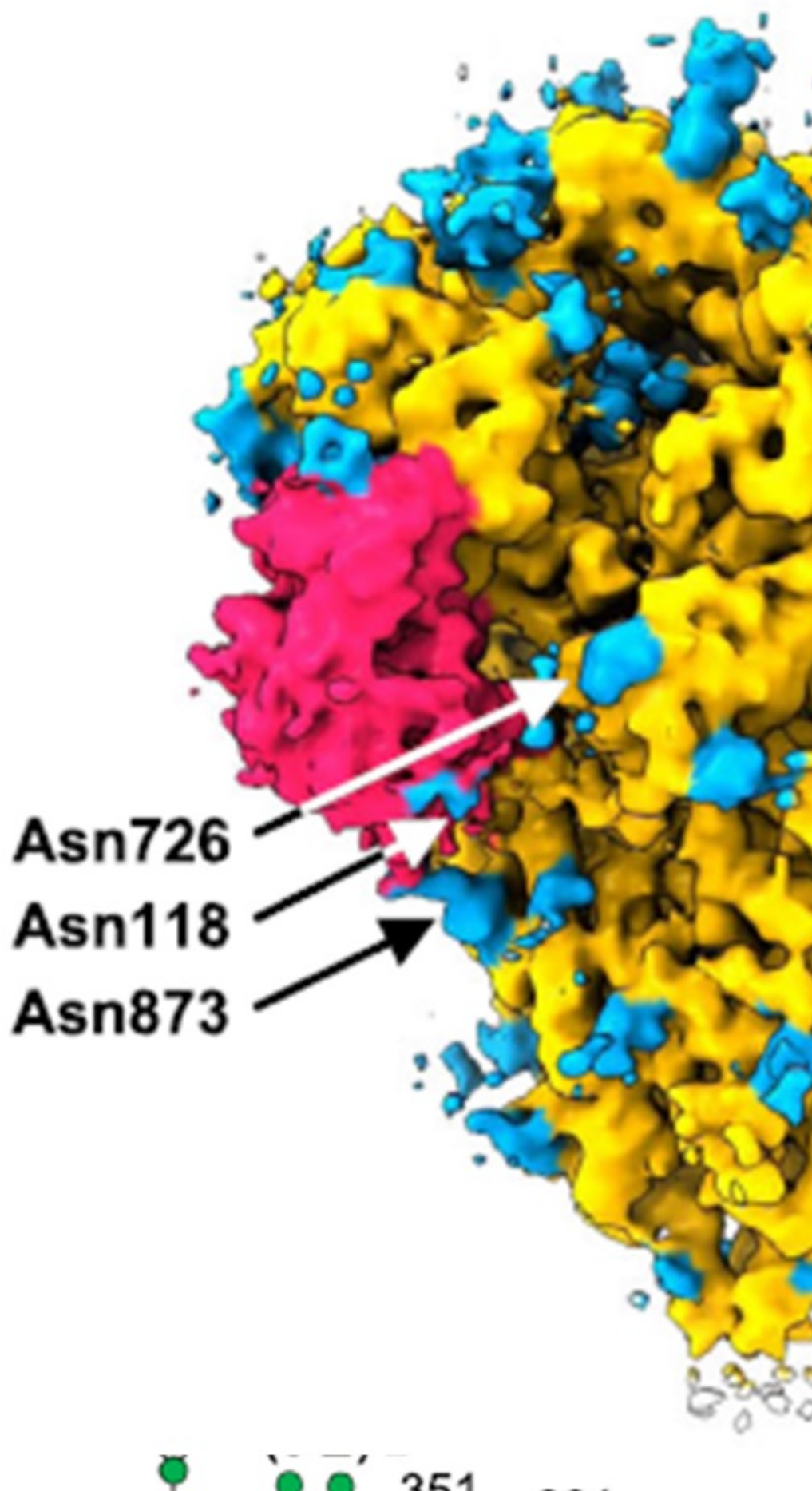




functional states. The existence of the D0 is a unique feature of alphacoronavirus.



A combined cryo-electron tomography (cryo-ET) and cryo-electron microscopy (cryo-EM) analysis establishes, in situ, the asynchronous S protein motions on intact viral particles of a highly virulent PEDV Pintung 52 strain. The cryo-EM-solved structure of the recombinant S protein derived from a porcine cell line reveals additional domain motions likely associated with receptor binding. The integration of mass spectrometry and cryo-EM, data delineates the complex compositions and spatial distribution of the PEDV S protein N-glycans. It demonstrates the functional role of a key N-glycan in modulating the D0 conformation.

**Category**

1. News