

Showcasing research from the Pentelute (MIT) and Nile (Calico Life Sciences LLC) laboratories, United States of America.

Discovery of reactive peptide inhibitors of human papillomavirus oncoprotein E6

The covalent peptide ligand 13 mimicking the binding motif in the E6AP protein selectively crosslinks to human papillomavirus 16 oncoprotein E6 (HPV16 E6) with quantitative conversion. Depicted is the HPV E6 protein structure in blue, complexed with covalent peptide 13 in orange, interacting through the dehydroalanine (Dha) unnatural amino acid of 13 with a cysteine residue of HPV E6. Red HPV viruses provide context in the background. Chemical moieties used to improve potency on peptide 13 are highlighted in purple, with corresponding structure-activity data shown. Cover artwork by Allison Bruce.



