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**ABOUT THE COVER**

The polo-box domain (PBD) has critical roles in the mitotic functions of PLK1. Fragment ligated inhibitory peptides (FLIP) were generated with comparable affinity to peptide PBD inhibitors and possess antiproliferative phenotypes in cells consistent with the observed decrease in PLK1 centrosomal localization. FLIPs induced monopolar and multipolar spindles, in contrast to previously reported small molecule PBD inhibitors that display phenotypes only partially representative of PLK1 knockdown. PBD inhibitors retain high specificity for PLK1 over PLK3 and show the promise of non-ATP competitive kinase inhibitors as antitumor therapeutics. For details, see the article by McInnes and colleagues on page 1683.