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(54) **Title:** PROTEASE-RESPONSIVE PEPTIDE BIOSENSORS AND METHODS FOR ANALYTE DETECTION

(57) **Abstract:** The present invention relates to peptide biosensors comprising (a) a protease recognition site; (b) an analyte binding site; and (c) a signaling moiety that can produce a detectable signal upon cleavage of the protease recognition site by a protease. Further encompassed are detection reagents that comprise said peptide biosensors in combination with a protease and methods for detecting the presence of an analyte molecule or screening of candidate compounds that modulate the binding of an analyte to a binding partner of the analyte.

