



**Non-Confidential  
Technology Disclosure**

<b>Title:</b>	Novel centrosome proteins involved in cytokinesis and cell cycle control
<b>Investigator:</b>	Steve Doxsey, Ph.D., Associate Professor; Dept. of Cell Biology, Dept. of Molecular Medicine, University of Massachusetts Medical School.
<b>Description:</b>	Centriolin is a novel human component of the centrosome/ centriole that is anchored to the centrosome by pericentrin-B. This invention discloses the necessity of centriolin and pericentrin-B for the completion of cytokinesis and entry into S phase. Further, cell division can be controlled by using centriolin or pericentrin-B modulators that disrupt the microtubule organization of the cell. Nucleic acid and polypeptide sequences of centriolin and pericentrin-B were also determined.
<b>Application:</b>	This invention has possible uses in: <ul style="list-style-type: none"><li>• Research applications to reduce or prevent cell division</li><li>• Research applications to produce hybridization probes</li><li>• Diagnosing abnormal centrosome function</li><li>• Pharmaceutical compositions to treat disorders due to abnormal centrosome function</li><li>• Treatment for cancers that would drive cell-cycle arrest in cancer cells</li></ul>
<b>Advantages:</b>	This invention provides: <ul style="list-style-type: none"><li>• Polypeptide and nucleic acid sequences, which could be used to produce hybridization probes</li><li>• Modulation of cell division for treatment of diseases</li><li>• The ability to diagnose disorders in centriolin or pericentrin-B expression or activity</li></ul>
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