Method for Screening Modulators of Aromatase Gene Expression in Breast Cancer

DESCRIPTION

The human aromatase gene is involved in the development and progression of breast cancer. The Proline-rich Nuclear Receptor Co-Regulatory (PNRC) protein interacts with other nuclear receptors (such as the estrogen-receptor) to regulate the expression of aromatase in addition to other cancer-related genes.

This technology is an assay directed toward screening for compounds that affect the binding of PNRC (and related proteins) to a wide array of nuclear receptor proteins. This assay may be used to isolate compounds that inhibit critical cancer-promoting genes, including aromatase. Such inhibitors could translate to novel therapeutics capable of overcoming the growing problem of endocrine resistance in breast cancer.

KEY ASPECTS

• Applicable for cancer drug discovery efforts as a broad screening platform to identify novel therapeutics
• Powerful approach to target the PNRC pathway and inhibit aromatase expression
• Useful for identifying new line of therapy to overcome endocrine resistance in breast cancer
• Unique from other related assays, which are ineffective at identifying modulators of PNRC binding

INTELLECTUAL PROPERTY

<table>
<thead>
<tr>
<th>Title</th>
<th>US Patent Number</th>
<th>Issued</th>
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<tr>
<td>Drug Screening Using a Proline-Rich Nuclear Receptor Co-Regulatory Protein/Nuclear Receptor Co-Expression System</td>
<td>6,972,178</td>
<td>12/6/2005</td>
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<tr>
<td>Method of Screening a Chemical for Binding to a Proline-rich Nuclear Receptor Co-regulatory Protein/Nuclear Receptor Complex</td>
<td>7,223,548</td>
<td>5/29/2007</td>
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</tbody>
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