Steroid Hormone Receptor Antibody Sampler Kit

For Research Use Only. Not For Use In Diagnostic Procedures.

Product Includes

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
<th>Mol. Wt.</th>
<th>Isotype/Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androgen Receptor (D6F11) XP® Rabbit mAb</td>
<td>20 µL</td>
<td>110 kDa</td>
<td>Rabbit IgG</td>
</tr>
<tr>
<td>Estrogen Receptor α (D8H8) Rabbit mAb</td>
<td>20 µL</td>
<td>66 kDa</td>
<td>Rabbit IgG</td>
</tr>
<tr>
<td>Glucocorticoid Receptor (D6H2L) XP® Rabbit mAb</td>
<td>20 µL</td>
<td>94, 91 kDa</td>
<td>Rabbit IgG</td>
</tr>
<tr>
<td>Progesterone A/B (D802J) XP® Rabbit mAb</td>
<td>20 µL</td>
<td>90 (PR-A), 118 (PR-B) kDa</td>
<td>Rabbit IgG</td>
</tr>
<tr>
<td>Mineralocorticoid Receptor (E9W1M) Rabbit mAb</td>
<td>20 µL</td>
<td>120 kDa</td>
<td>Rabbit IgG</td>
</tr>
</tbody>
</table>

Anti-rabbit IgG, HRP-linked Antibody: 100 µL

Storage: -20°C. Do not aliquot the antibodies.

Please visit www.cellsignal.com for validation data and a complete listing of recommended companion products.

Background References:


See www.cellsignal.com for individual component applications, species cross-reactivity, dilutions, and additional application protocols.

Description: The Steroid Hormone Receptor Antibody Sampler Kit provides an economical means of detecting levels of steroid hormone nuclear receptors. The kit includes enough antibodies to perform two western blot experiments with each primary antibody.

Background: Androgen receptor (AR), a zinc finger transcription factor belonging to the nuclear receptor superfamily, is activated by phosphorylation and dimerization upon ligand binding (1). This promotes nuclear localization and binding of AR to androgen response elements in androgen target genes. Research studies have shown that AR plays a crucial role in several stages of male development and the progression of prostate cancer (2, 3). Estrogen receptor α (ERα), a member of the steroid receptor superfamily, contains highly conserved DNA-binding and ligand-binding domains (4). Through its estrogen-independent and estrogen-dependent activation domains (AF-1 and AF-2, respectively), ERα regulates transcription by recruiting coactivator proteins and interacting with general transcriptional machinery (5). Human progesterone receptor (PR) is expressed as two forms: the full length PR-B and the short form PR-A. PR-A lacks the first 164 amino acid residues of PR-B (6, 7). Both PR-A and PR-B are ligand activated, but differ in their relative ability to activate target gene transcription (8, 9). Glucocorticoid hormones control cellular proliferation, inflammation, and metabolism through their association with the glucocorticoid receptor (GR)/NR3C1, a member of the nuclear hormone receptor superfamily of transcription factors (10). GR is composed of several conserved structural elements, including a carboxy-terminal ligand-binding domain (which also contains residues critical for receptor dimerization and hormone-dependent gene transactivation), a neighboring hinge region containing nuclear localization signals, a central zinc-finger-containing DNA-binding domain, and an amino-terminal variable region that participates in ligand-independent gene transcription. In the absence of hormone, a significant population of GR is localized to the cytoplasm in an inactive conformation (which also contains residues critical for receptor dimerization and hormone-dependent gene transactivation). In the absence of hormone, a significant population of GR is localized to the cytoplasm in an inactive conformation.