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Effects of Drugs on Cellular Control Mechanisms

Edited by B. R. Rabin and R. B. Freedman

This volume contains the proceedings of the 1971 Biological Council Symposium held in April this year. To avoid too diffuse a coverage over a wide area, contributors were asked to consider in depth two of the most significant and well studied mechanisms: those involving steroid hormones and those influenced by the ubiquitous 'second messenger' cyclic adenosine monophosphate (cAMP).

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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Buffer</th>
<th>pKa*</th>
</tr>
</thead>
<tbody>
<tr>
<td>MES</td>
<td>2-(N-morpholino)ethanesulfonic acid</td>
<td>6.15</td>
</tr>
<tr>
<td>PIPES</td>
<td>Piperazine-N, N'-bis(2-ethanesulfonic acid)</td>
<td>6.80</td>
</tr>
<tr>
<td>BES</td>
<td>N, N-bis(2-hydroxyethyl)-2-aminoethanesulfonic acid</td>
<td>7.15</td>
</tr>
<tr>
<td>MOPS</td>
<td>3-(N-morpholino)propanesulfonic acid</td>
<td>7.20</td>
</tr>
<tr>
<td>TES</td>
<td>N-tris(hydroxymethyl)methyl-2-aminoethanesulfonic acid</td>
<td>7.50</td>
</tr>
<tr>
<td>HEPES</td>
<td>N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid</td>
<td>7.55</td>
</tr>
<tr>
<td>EPPS</td>
<td>N-2-hydroxyethylpiperazinepropanesulfonic acid</td>
<td>8.00</td>
</tr>
<tr>
<td>TRICINE</td>
<td>N-tris(hydroxymethyl)methylglycine</td>
<td>8.15</td>
</tr>
<tr>
<td>BICINE</td>
<td>N, N-bis(2-hydroxyethyl)glycine</td>
<td>8.35</td>
</tr>
<tr>
<td>CHES</td>
<td>3-(cyclohexylamino)ethanesulfonic acid</td>
<td>9.55</td>
</tr>
<tr>
<td>CAPS</td>
<td>3-(cyclohexylamino)propanesulfonic acid</td>
<td>10.40</td>
</tr>
</tbody>
</table>

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- Nucleoside diphosphate kinase
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- Pepsin
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- Phosphatase alkaline
- UDPG pyrophosphorylase

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- DL-3-Hydroxybutyrate
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Nucleotides
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- Uridine-5'-diphospho-galactose
- Poly A-C
- Poly I-C
- Xanthosine-3':5'-monophosphate cyclic

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