

Product Specification Sheet

**Connexin Mimetic Peptides**

Cat. # Cx2605-P-1	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> Control Peptide	<b>SIZE:</b> 1 mg
Cat. # Cx2605-P-5	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> Control Peptide	<b>SIZE:</b> 5 mg
Cat. # Cx2606-PS-1	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> Scrambled Peptide	<b>SIZE:</b> 1 mg
Cat. # Cx2606-PS-5	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> Scrambled Peptide	<b>SIZE:</b> 5 mg

**Gap junctions** contain channels that allow the passage of ions and small molecules between adjacent cells. This intercellular communication has been implicated in the coordination of cellular responses to intracellular signaling molecules.

**Connexins** are a family of integral membrane proteins that oligomerize to form intercellular channels that are clustered at gap junctions. Connexins share a common transmembrane (TM) topology. Each connexin is thought to contain 4 TM domains, with two extracellular and three cytoplasmic regions.

**Connexin-mimetic peptides**, i.e. peptides that are identical with a short amino acid sequence on the Cx subunit have recently emerged as tools to block Connexin hemi-channels (CxHcs) with little or no immediate effects on gap junctions.

**Gap 26** corresponds to amino acid sequence on the first extracellular loop of Cx43. The sequence comprises conserved domain VCYD which interfaces with the membrane. Gap26 inhibits CxHc within minutes and gap junction later. Peptides homologous to first Extracellular loop motifs of Connexin 43 reversibly abolish rhythmic contractile activity in rabbit arteries (1).

**Source of Peptide**

<b>Cat #s</b>	<ul style="list-style-type: none"> <li>Cx2605-P-1</li> <li>Cx2605-P-5</li> </ul>
<b>Sequence</b>	V-C-Y-D-K-S-F-P-I-S-H-V-R
<b>Identity</b>	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> <b>Control Peptide</b>
<b>Location</b>	64 - 76 aa
<b>Purity</b>	>90%; HPLC Purified
<b>Mol. Wt.</b>	1550.81
<b>Form</b>	Lyophilized Powder
<b>Solubility</b>	Soluble in DMF

<b>Cat #</b>	<ul style="list-style-type: none"> <li>Cx2606-PS-1</li> <li>Cx2606-PS-5</li> </ul>
<b>Sequence</b>	C-F-V-R-S-S-V-P-H-K-D-Y-I
<b>Identity</b>	Human/Mouse/Rat <sup>43</sup> Cx-Gap <sub>26</sub> <b>Scrambled Peptide</b>
<b>Location</b>	64 - 76 aa
<b>Purity</b>	>90%; HPLC Purified
<b>Mol. Wt.</b>	1550.81
<b>Form</b>	Lyophilized Powder
<b>Solubility</b>	Soluble in DMF

**Storage**

**Short-term:** unopened, undiluted liquid vials for less than a week at 4°C.

**Long-term:** Store at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw or store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder.

**Recommended Usage**

**General References:**

1) Chaytor B E, et al., (1997) J. Physiol. (London). 503: 99-110.

\*This product is for In vitro research use only.

**Related material available from ADI**

Control and scrambled Peptides to mouse, rat and human Gap27, Gap24 and CxHc-32

Cx2605-06-P-1-5

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