

Product Specification Sheet

Connexin Mimetic Peptides

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

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

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