ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Connexin Mimetic Peptides

Cat. # Cx2601-P-1	Human/Mouse/Rat ^{37,40}Cx-Gap$_{26}$ Control Peptide	**SIZE**: 1 mg
Cat. # Cx2601-P-5	Human/Mouse/Rat ^{37,40}Cx-Gap$_{26}$ Control Peptide	**SIZE**: 5 mg
Cat. # Cx2602-PS-1	Human/Mouse/Rat ^{37,40}Cx-Gap$_{26}$ Scrambled Peptide	**SIZE**: 1 mg
Cat. # Cx2602-PS-5	Human/Mouse/Rat ^{37,40}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 gap junctional transfer of fluorescent dyes, electrical coupling and synchronized Ca2+ oscillations in smooth-muscle cells (1).

Source of Peptide

Cat #s	• Cx2601-P-1 • Cx2601-P-5
Sequence	V-C-Y-D-Q-A-F-P-I-S-H-I-R
Identity	Human/Mouse/Rat ^{37,40}Cx-Gap$_{26}$ Control Peptide
Location	64 – 76 aa
Purity	>90%; HPLC Purified
Mol. Wt.	1548.80
Form	Lyophilized Powder
Solubility	Soluble in DMF

Cat #	• Cx2602-PS-1 • Cx2602-PS-5
Sequence	V-R-I-F-C-D-Q-I-Y-H-A-S-P
Identity	Human/Mouse/Rat ^{37,40}Cx-Gap$_{26}$ Scrambled Peptide
Location	64 – 76 aa
Purity	>90%; HPLC Purified
Mol. Wt.	1548.80
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) Martin P E, et al., (2005) Br. J. Pharmacol. 144: 617-627.

*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

Cx2601-P-1-5; Cx2602-PS-1-5 70613J

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