# DPc10 Inactive Peptide

Quality Control Certificate of Analysis
Catalogue No.: A010-515
Unit Size: 200µg
Lot no.: 642048

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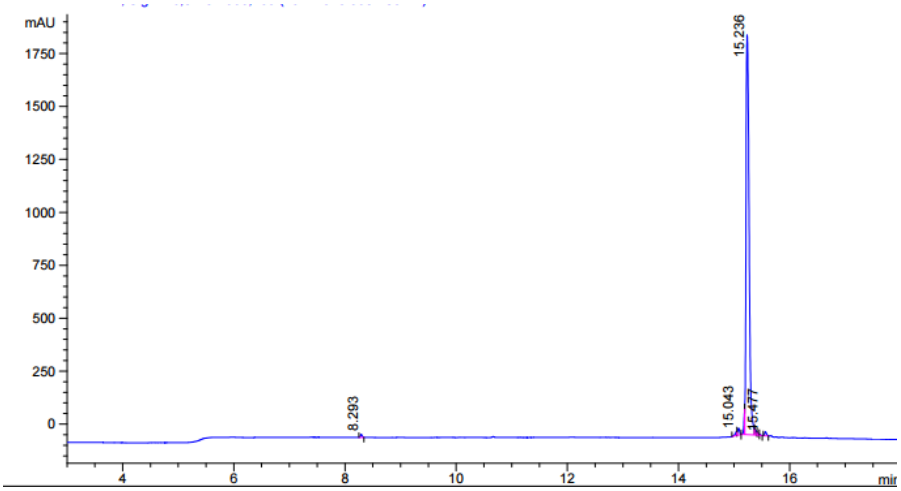
|---|---|
| **Description** | DPc10 inactive peptide is a 36-residue peptide that differs from DPc10 Gly2460-Pro2495, rabbit) at one position (R2475S) and represents the sequence of a known CPVT mutant RyR2 domain. This peptide binds weakly or fails to bind to the DPc10 interface and does NOT affect channel function. It serves as a negative control for research projects using DPc10 peptide.<br><br>DPc10 inactive in the current form is not cell permeable. The product is useful in applications that permit access to RyR2 directly (via whole cell patch, skinned cells, black lipid membrane, vesicles, or upon delivery to cytoplasm). |
| **Quantity supplied** | 200µg net peptide* |
| **Peptide name** | DPc10 Inactive Peptide |
| **Peptide sequence** | GFCPDHKAAMVLFLDSVYGIEVQDFLLHLLEVGFLP |
| **N-terminus** | Amine |
| **C-terminus** | Acid |
| **Counter ions** | TFA |
| **Molecular weight** | 4034.726 |
| **Purity** | 95% (by HPLC) |
| **HPLC analysis** | |




**Trace: HPLC Analysis of DPc10 Inactive Peptide**. Analysis carried out using 100 Å 4.6 x 50mm column, gradient from 0%-80% acetonitrile, in 8 minutes. Purity determined as 95%.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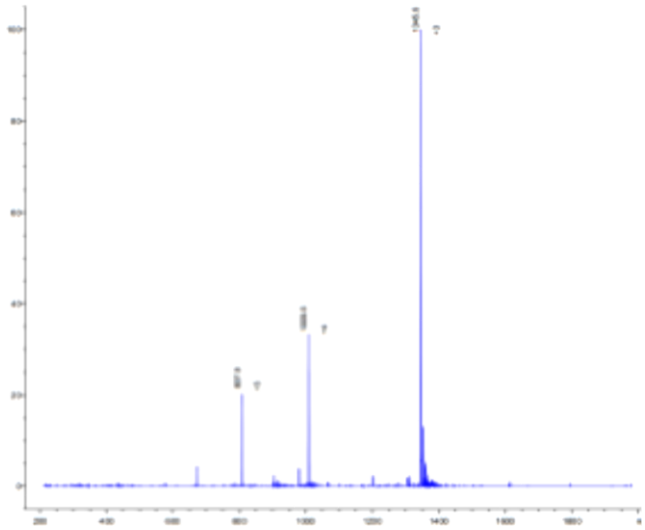
**MS analysis**



**Trace: Mass Spectrometric Analysis of Inactive DPc10 Peptide**. Molecular ion predicted: 4034.726 observed: 4034.1 [M+3H]. The range of molecular ions observed is due to the various multiply charged forms of the peptide ([M+3H], [M+4H], etc.).

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| **Appearance** | Off white powdered solid. |
| **Solubilisation** | DMSO use minimum volume to limit solvent concentration in experiments. |
| **Storage** | Store desiccated at -20°C for up to 1 year in solid form. Dissolve in DMSO immediately before use in experiments. |
| **Notes** | The product was purified in acetonitrile and water containing 0.1% trifluoroacetic acid (TFA) prior to lyophilisation. The product will therefore be present as its trifluoroacetic acid salt.<br>*Peptide is supplied by net peptide weight. Whilst the purity of the material has been shown to be >95%, the net peptide content is lower due to counterions and residual water molecules present in the material after purification. To compensate for this the amount of peptide weighed out is adjusted so that the weight of active material received is exactly as stated on the vial. This means that the total mass supplied will be in excess of 200µg, but there will be exactly 200µg of the active peptide in the vial. |
| **The DPc10 Peptide range** | 1. DPc10 Peptide (Cat. A010-514)<br>2. DPc10 Inactive Peptide (Cat. A010-515)<br>3. Fluorescein DPc10 Peptide (Cat. A010-516)<br>4. Fluorescein DPc10 Inactive Peptide (Cat. A010-517) |


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