

## Kisspeptin-54(human)

|                             |   |   |
|-----------------------------|---|---|
| <b>Cat. No.:</b>            | HY-P1022  |   |
| <b>CAS No.:</b>             | 374683-24-6   |   |
| <b>Molecular Formula:</b>   | C <sub>258</sub> H <sub>401</sub> N <sub>79</sub> O <sub>78</sub>   |   |
| <b>Molecular Weight:</b>    | 5857.43   | GTSLSPPPESSGSRQQPGLSAPHSRQIPA-PQGAVLVQREKDLPNYNWNSFGLRF-NH <sub>2</sub> |
| <b>Sequence:</b>            | Gly-Thr-Ser-Leu-Ser-Pro-Pro-Pro-Glu-Ser-Ser-Gly-Ser-Arg-Gln-Gln-Pro-Gly-Leu-Ser-Ala-Pro-His-Ser-Arg-Gln-Ile-Pro-Ala-Pro-Gln-Gly-Ala-Val-Leu-Val-Gln-Arg-Glu-Lys-Asp-Leu-Pro-Asn-Tyr-Asn-Trp-Asn-Ser-Phe-Gly-Leu-Arg-Phe-NH <sub>2</sub> |   |
| <b>Sequence Shortening:</b> | GTSLSPPPESSGSRQQPGLSAPHSRQIPAPQGAVLVQREKDLPNYNWNSFGLRF-NH <sub>2</sub>  |   |
| <b>Target:</b>              | GnRH Receptor   |   |
| <b>Pathway:</b>             | GPCR/G Protein  |   |
| <b>Storage:</b>             | Sealed storage, away from moisture and light, under nitrogen  |   |
|                             | Powder  | -80°C 2 years<br>-20°C 1 year   |
|                             | * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)   |   |

### SOLVENT & SOLUBILITY

|   |  |                      |             |             |              |
|---|--|----------------------|-------------|-------------|--------------|
| <b>In Vitro</b>   | H <sub>2</sub> O : 50 mg/mL (8.54 mM; Need ultrasonic) |                      |             |             |              |
|   |  | <b>Solvent</b>       | <b>Mass</b> |             |              |
|   |  | <b>Concentration</b> | <b>1 mg</b> | <b>5 mg</b> | <b>10 mg</b> |
|   | <b>Preparing Stock Solutions</b>                       | <b>1 mM</b>          | 0.1707 mL   | 0.8536 mL   | 1.7072 mL    |
|   |  | <b>5 mM</b>          | 0.0341 mL   | 0.1707 mL   | 0.3414 mL    |
|   | <b>10 mM</b>   | ---                  | ---         | ---         |              |
| Please refer to the solubility information to select the appropriate solvent. |  |                      |             |             |              |

### BIOLOGICAL ACTIVITY

|                                     |   |
|-------------------------------------|---|
| <b>Description</b>                  | Kisspeptin-54(human) (Metastin(human)) is an endogenous ligand for kisspeptin receptor (KISS1, GPR54). Kisspeptin-54(human) binds to rat and human GPR54 receptors with K <sub>i</sub> values of 1.81 nM and 1.45 nM, respectively. Kisspeptin-54(human) hinders tumor metastasis and stimulates gonadotropin secretion <sup>[1][2]</sup> . |
| <b>IC<sub>50</sub> &amp; Target</b> | Ki: 1.81 nM (Rat GPR54) and 1.45 nM (Human GPR54) <sup>[2]</sup>  |

### REFERENCES

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[1]. M L Gottsch, et al. A Role for Kisspeptins in the Regulation of Gonadotropin Secretion in the Mouse. *Endocrinology*. 2004 Sep;145(9):4073-7.

[2]. M Kotani, et al. The Metastasis Suppressor Gene KiSS-1 Encodes Kisspeptins, the Natural Ligands of the Orphan G Protein-Coupled Receptor GPR54. *J Biol Chem*. 2001 Sep 14;276(37):34631-6.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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