

Product Specification Sheet

**HER 2 peptide**

**Cat #HER2- 776-P**

HER2 peptide, (776 – 790, fused with LRMK, C-Term), vaccine candidate; antigen grade

**Size: 5 mg**

HER2 (Neu /ErbB-2/CD340/ p185) is a member of the epidermal growth factor receptor (EGFR/ErbB) family of receptor tyrosine kinases. It is an onco protein that is over expressed in 20-30% of breast cancers. It has an extra cellular domain (1-652 a.a), a transmembrane domain (653-675 a.a) and an intra cellular domain (676 – 1255 a.a). In patients with HER2-overexpressing tumors, different studies have shown cellular and/or humoral immune responses against HER2 in early stages of the disease Immunological tolerance against HER2 antigen represents a barrier to effective vaccination.

Peptide vaccines contain antigenic epitopes derived from Her2 domains for the induction of peptide-specific immune regulators (antibodies, helper T-cells and cytotoxic T lymphocytes). Numerous clinical trials have been conducted using various peptide preparations, with or without adjuvants.

**HER2-776-P** AE37 peptide (776-790) is a HER2/Neu-derived epitope linked to li-Key peptide (li-Key/HER2/neu hybrid peptide or AE37). A Phase I clinical trial administering AE37, a HER2/neu Class II epitopes to disease-free, NN breast cancer patients showed that the li-Key moiety, a 4-amino acid (LRMK) epitope from the MHC class II-associated invariant chain (li protein), increases T-helper cell stimulation.

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<b>Sequence</b>	Ac-LRMKGVGSPYVSRLLGICL-NH2
<b>Avg. mass</b>	994.8
<b>Purity</b>	>93%
<b>Form and storage</b>	Powder. Store at -20°C up to 1 year.
<b>Shipping</b>	Shipped at 4° C
<b>Solubility</b>	Not tested

**General references:**

GE Peoples “Clinical trial results of a HER2/neu (E75) vaccine to prevent recurrence in high-risk breast cancer patients”  
Journal of clinical oncology, 2005.171.66.121.246

**Related Items**

HER2-597-P, HER2-369-P, , HER2-563-P, HER2-585-P, HER2-613-P, HER2-828-P, HER225-R-10, HER26-R-10,

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