

Product Specification Sheet

HER 2 peptide

Cat #HER2-369-P

HER2 peptide, (369 – 377), E 75 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.

HER2-369-P is a peptide that corresponds to the a.a sequence of the E75 peptide vaccine (367-377) The E75 peptide contains an epitope, derived from the protein's extracellular domain. E75 binds the HLA-A2 allele. Three clinical studies used E75 as an anti-HER2 vaccine in combination with incomplete Freund's adjuvant (IFA) or GM-CSF and showed that vaccination induced a specific anti-peptide immune response with no associated toxicity.

Cat# HER2-369-P

Sequence	KIFGSLAFL
Avg. mass	994.8
Purity	>93%
Form and storage	Powder. Store at -20°C up to 1 year.
Shipping	Shipped at 4° C
Solubility	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.....050312P