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# IDO Peptide Vaccine IO102

National Cancer Institute

## Source

National Cancer Institute. *IDO Peptide Vaccine IO102*. NCI Thesaurus. Code C159498.

A second-generation peptide vaccine derived from the immunomodulatory enzyme indoleamine 2,3-dioxygenase (IDO) with potential immunomodulating and antineoplastic activities. Vaccination with IDO peptide vaccine IO102 may activate the immune system to induce an immune response against IDO-expressing tumor cells. This may restore the proliferation and activation of various immune cells including cytotoxic T-lymphocytes (CTLs), natural killer cells (NKs), and dendritic cells (DCs), and may eradicate IDO-expressing tumor cells through a CTL-mediated response. IDO, a cytosolic enzyme responsible for tryptophan catabolism and conversion of tryptophan into kynurenine, is overexpressed by a variety of tumor cell types and antigen presenting cells (APCs) and plays an important role in immunosuppression mainly through suppression of CTL activation.