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HPV 16 E7 Antigen-expressing *Lactobacillus casei* Vaccine BLS-ILB-E710c

National Cancer Institute

Source

National Cancer Institute. *HPV 16 E7 Antigen-expressing Lactobacillus casei Vaccine BLS-ILB-E710c*. NCI Thesaurus. Code C117240.

An orally available *Lactobacillus casei* (L. casei)-based vaccine expressing the human papillomavirus (HPV) type 16 isoform E7 protein linked to the poly-gamma-glutamate synthetase complex gene *pgsA*, with potential immunostimulating activity. Upon oral administration, the expressed HPV 16 E7 may stimulate the immune system to mount a mucosal cytotoxic T-lymphocyte (CTL) response against HPV 16 E7-expressing tumor cells. The poly-glutamic acid synthetase PgsA from *Bacillus subtilis* acts as an anchoring motif that facilitates the expression of the HPV antigen protein on the surface of the bacteria. HPV 16 E7, a cell surface glycoprotein and tumor associated antigen, is overexpressed in various viral-related cancers.