In another aspect, the present disclosure further relates to a method for treating or preventing a tumor or cancer, the method comprising administering to a subject in need thereof a therapeutically effective dose of the antibody-drug conjugate or the pharmaceutically acceptable salt thereof according to any one of the foregoing or the aforementioned pharmaceutical composition, wherein the tumor or cancer is selected from the group consisting of:

lung cancer (e.g., small cell lung cancer, non-small cell lung cancer, and large cell lung cancer), head and neck squamous cell carcinoma, head and neck cancer, brain cancer, neuroglioma, glioblastoma multiforme, neuroblastoma, central nervous system cancer, neuroendocrine tumor, throat cancer, pharyngeal squamous cell carcinoma, oral squamous cell carcinoma, nasopharyngeal cancer, esophageal cancer, thyroid cancer (e.g., medullary thyroid cancer), malignant pleural mesothelioma, breast cancer (e.g., triple-negative breast cancer), liver cancer, hepatobiliary cancer, pancreatic cancer, gastric cancer, gastrointestinal cancer, intestinal cancer, colorectal cancer (e.g., colon cancer and rectal cancer), kidney cancer, clear cell renal cell carcinoma, ovarian cancer, endometrial cancer, cervical cancer, bladder cancer, prostate cancer, testicular cancer, adrenal cancer, glioblastoma, skin cancer, and melanoma; preferably, the lung cancer is small cell lung cancer.

The antibody-drug conjugate provided by the present disclosure has a good affinity for cell surface antigens, can be effectively endocytosed by a DLL3-expressing cell, and has a very strong tumor growth-inhibiting effect, as well as good safety.

In another aspect, the present disclosure refers to the antibody-drug conjugate or the pharmaceutically acceptable salt thereof as disclosed herein or the pharmaceutical composition as disclosed herein for use in therapy.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A to FIG. 1C show the binding of Hu6 and Hu100 antibodies to DLL3 of different species. FIG. 1A shows FACS results for the binding of Hu6 and Hu100 antibodies to H1184 cells; FIG. 1B shows FACS results for the binding of Hu6 and Hu100 antibodies to cynoDLL3/CHO-s cells; FIG. 1C shows FACS results for the binding of Hu6 and Hu100 antibodies to ratDLL3/CHO-s cells.

FIG. 2 shows experimental results for the competitive binding of different anti-DLL3 antibodies. The results show that Hu6 and Hu100 did not compete with BI-764532, indicating that antibodies Hu6 and Hu100 bind to different epitopes than BI-764532 does.

FIG. 3 shows results for the endocytosis of Hu6 and Hu100 antibodies by cells; the results show that both Hu6 and Hu100 can be endocytosed by cells.

FIG. 4A to FIG. 4B show results for the binding of ADC-1, ADC-2, and ADC-3 to human and monkey DLL3 cells. FIG. 4A shows results for the binding of ADC-1, ADC-2, and ADC-3 to human DLL3 cells; FIG. 4B shows results for the binding of ADC-1, ADC-2,

and ADC-3 to monkey DLL3 cells.

FIG. 5A to FIG. 5E show the growth-inhibiting effects of ADC-1, ADC-2, and ADC-3 on different cells. FIG. 5A shows results for the inhibition of the growth of H1184 cells that