What is claimed is:

1. A monoclonal or polyclonal antibody or an antigen binding fragment thereof comprising an antigen binding site that binds specifically to any one of the C1ORF32 polypeptides having the sequence of any one of SEQ ID NOs: 14, 1, 7, 9-11, 13, 15, 17, 103, and/or fragments, and/or epitopes thereof, for use in the treatment of cancer, wherein said antibody or fragment increases interferon-gamma production by T-cells, and wherein the cancer expresses one or more C1ORF32 polypeptides on the cancer cells or in the immune cells infiltrating cancer cells congregated as a tumor.

2. The antibody or antigen binding fragment of claim 1, comprising an antigen binding site that binds specifically to any of SEQ ID NOS: 2, 3, 5, 6.

3. The antibody or antigen binding fragment of the above claims, wherein the antibody or fragment increases immune response against the cancer.

4. The antibody or antigen binding fragment according to any of the above claims, wherein the antibody is a fully human antibody, chimeric antibody, humanized or primatized antibody.

5. The antibody or the antigen binding fragment according to any of the above claims, wherein the antibody is selected from the group consisting of Fab, Fab', F(ab')2, F(ab'), F(ab), Fv or scFv fragment and minimal recognition unit.

6. The antibody or the antigen binding fragment according to any of the above claims, wherein the antibody is coupled to a moiety selected from a drug, a radionuclide, a fluorophore, an enzyme, a toxin, a therapeutic agent, or a chemotherapeutic agent; and wherein the ~~detectable marker~~moeity is a radioisotope, a metal chelator, an enzyme, a fluorescent compound, a bioluminescent compound or a chemiluminescent compound.

7. A pharmaceutical composition comprising an antibody or an antigen binding fragment according to any of the above claims.

8. The antibody, antigen binding fragment or pharmaceutical composition of any of the above claims, wherein said treatment comprises an additional therapy, wherein the additional therapy is radiation therapy, antibody therapy, chemotherapy, photodynamic therapy, adoptive T cell therapy, Treg depletion, surgery or combination therapy with conventional drugs.

selected from Ductal and Mucinous Adenocarcinoma, Islet cell carcinoma, familial atypical multiple mole melanoma-pancreatic cancer syndrome (FAMMM-PC), Exocrine pancreas cancers, ductal adenocarcinoma, denosquamous carcinomas, signet ring cell carcinomas, hepatoid carcinomas, colloid carcinomas, undifferentiated carcinomas, and undifferentiated carcinomas with osteoclast-like giant cells, Low- to intermediate-grade neuroendocrine carcinomas and pancreatic carcinoid tumors, stage IV malignant melanoma, Lentigo maligna melanoma, Superficial spreading melanoma, Acral lentiginous melanoma, Mucosal melanoma, Nodular melanoma, Polypoid melanoma, Desmoplastic melanoma, Amelanotic melanoma, Soft-tissue melanoma, Osteogenic sarcoma, Chondrosarcoma, Leiomyosarcoma, Angiosarcoma, Askin's Tumor, Ewing's sarcoma, Kaposi's sarcoma, Liposarcoma, Malignant fibrous histiocytoma, Rhabdomyosarcoma, Neurofibrosarcoma, Hodgkin's lymphoma, B-cell Lymphoma, Mantle cell lymphoma (MCL), T-cell Lymphoma, Endometroid Adenocarcinoma, Bladder Transitional Cell carcinoma, Small Cell Lung Cancer, Non Small Cell Lung Cancer, Large-cell lung carcinoma, testicular seminoma, moderate to poorly differentiated Colo-rectal adenocarcinoma, and spinal cord tumor; wherein the detection is conducted by immunoassay, wherein the detection is conducted using the antibody or antigen binding fragment according to at least one of the preceding claims.

25. The ~~antibody, antigen binding fragment,~~ method ~~or composition of any of the above claims~~as claimed in claim 24, wherein said Thyroid Carcinoma is selected from one or more of Thyroid Papillary Carcinoma, Thyroid Follicular Carcinoma (preferably stage II and III), incidental papillary carcinoma (IPC), Medullary thyroid cancer, Anaplastic thyroid cancer; or wherein said carcinoma of the esophagus is a squamous cell carcinoma of the esophagus; or wherein said Invasive Ductal Carcinoma is selected from stage II to IV and/or poorly differentiated Invasive Ductal Carcinoma, and/or wherein said Medullary Carcinoma is Grade 2 Medullary Carcinoma; or wherein said Serous and Mucinous ovarian carcinoma is selected from stages Ic to IIIb Serous and Mucinous ovarian carcinoma; or wherein said kidney Clear cell carcinoma is selected from stage I to II renal Clear cell carcinoma; or wherein said hepatocellular carcinoma is selected from stage II and III hepatocellular carcinoma; or wherein said Hodgkin's lymphoma is selected from Nodular sclerosing, Mixed-cellularity subtype, Lymphocyte-rich or Lymphocytic predominance, Lymphocyte depleted and Unspecified; or wherein said B-cell Lymphoma is selected from the group consisting