

Anti-5T4 [5T4 (H8)] Bulk Size Ab02338-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: 5T4 (H8)

Alternative Name(s) of Target: TPBG; M6P1; WAIF1; Trophoblast glycoprotein; 5T4 oncofetal antigen; 5T4 oncofetal trophoblast glycoprotein; 5T4 oncotrophoblast glycoprotein; Wnt-activated inhibitory factor 1

UniProt Accession Number of Target Protein: Q13641

Published Application(s): ELISA, Dot blot, IF, RIA, IP, IHC

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing male BALB/c mice with wheat germ agglutinin (WGA) purified glycoproteins from deoxycholate (DOC) solubilised human syncytiotrophoblast plasma membrane (StMPM).

Specificity: This antibody binds 5T4 antigen expressed on various carcinomas. It is reported that epitope recognized by this antibody is present in the extracellular domain of the molecule more particularly towards the membrane proximal leucine rich repeat 2 (LRR2) (PMID: 11903056).

Application Notes: This antibody binds 5T4 antigen with a very high affinity of $K(D)=1.8 \times 10^{-11}$ M (PMID: 11113573). The reactivity of this antibody to solubilised human syncytiotrophoblast plasma membrane (StMPM) was checked using immunodotting on nitrocellulose membrane and ELISA. The distribution of the 5T4 antigen was determined using mAb 5T4 by indirect immunoperoxidase staining of sections of normal organ and placental tissues as well as immunofluorescence and radiobinding assays with a wide variety of cell lines representing differing normal and tumour cell types. Immunoprecipitation of radiolabelled StMPM using this antibody indicated that 5T4 molecules are glycoproteins of mol. wt of approximately 72 kD on SDS-PAGE (PMID: 3355761). This paper (PMID: 2404511) studies the immunohistochemical distribution of 5T4 antigen and reports that 5T4 antigen is present in a wide range of tumor cells including carcinomas of the bladder, breast, cervix, endometrium, lung, oesophagus, ovary, pancreas, stomach and testicular non-seminomatous germ cell tumours. 5T4 can serve as a marker for detection of tumor. Various papers report the use of this antibody for the study of expression of 5T4 antigen in various types of cancers (PMID:

2404512, 1419629, 8180020, 11578488).

Antibody First Published in: Hole et al. A 72 kD trophoblast glycoprotein defined by a monoclonal antibody. Br J Cancer. (1988); 57(3):239-46. [PMID:3355761](#)

Note on publication: Describes the characterization of the 5T4 antigen using this antibody.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.