## Open Peer Review on Qeios

## Anti-FCRH5/CD3 BiTE Antibody BFCR4350A

National Cancer Institute

## Source

*National Cancer Institute. <u>Anti-FCRH5/CD3 BiTE Antibody BFCR4350A</u>. NCI Thesaurus. Code C139549.* 

A proprietary recombinant bispecific T-cell engager (BiTE) antibody composed of two single-chain variable fragments (scFv), one directed against the tumor-associated antigen (TAA) Fc receptor-like protein 5 (FCRH5; CD307; FCRL5; IRTA2; BXMAS1) and one that is directed against the CD3 antigen found on T-lymphocytes, with potential immunostimulating and antineoplastic activities. Upon administration of anti-FCRH5/CD3 BiTE antibody BFCR4350A, the bispecific antibody binds to both the CD3 antigen on cytotoxic T-lymphocytes (CTLs) and FCRH5 found on FCRH5-expressing tumor cells. This activates and crosslinks CTLs with FCRH5-expressing tumor cells, which results in the CTL-mediated cell death of FCRH5-expressing tumor cells. FCRH5, an immune receptor translocation-associated protein/Fc receptor homolog (IRTA/FCRH) family member and a B-cell lineage marker, is overexpressed on myeloma cells.