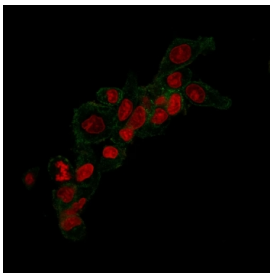
ErbB2 Antibody CF488 Conjugate / HER2 [clone HRB2/258] (V2109CF488)

Catalog No.	Formulation	Size
V2109CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	HRB2/258
Purity	Protein G affinity chromatography
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-3ug/ml
Limitations	This ErbB2 Antibody CF488 Conjugate is available for research use only.



ErbB2 Antibody CF488 Conjugate IF. Immunofluorescent staining of methanol-fixed human SLBR3 cells with ErbB2 antibody (clone HRB2/258, green) and Reddot nuclear stain (red).

Description

ErbB2 antibody CF488 Conjugate detects Receptor tyrosine-protein kinase erbB-2, also known as HER2, a membrane-bound receptor tyrosine kinase that regulates cellular growth, survival, and differentiation. The UniProt recommended name is Receptor tyrosine-protein kinase erbB-2 (ERBB2). This CF488-conjugated antibody allows direct fluorescence detection of HER2/ErbB2 expression in cells and tissues without the need for a secondary antibody, providing precise visualization of receptor localization and abundance.

Functionally, ErbB2 antibody CF488 Conjugate identifies a 185 kDa single-pass transmembrane protein that forms heterodimers with other members of the ERBB family, including EGFR (ERBB1), ERBB3, and ERBB4. These receptor interactions activate key intracellular signaling cascades such as the MAPK/ERK and PI3K/AKT pathways, driving cellular proliferation and inhibiting apoptosis. HER2/ErbB2 lacks a known ligand but serves as the preferred dimerization partner for other ERBB receptors, amplifying growth and survival signaling under both normal and pathological conditions.

The ERBB2 gene is located on chromosome 17q12 and is expressed in epithelial tissues of the heart, mammary gland, and gastrointestinal tract. While normally expressed at low levels, gene amplification or protein overexpression causes constitutive activation of mitogenic signaling. Elevated HER2/ErbB2 expression is a defining feature of several cancers, including breast, ovarian, and gastric carcinomas, where it contributes to tumor aggressiveness and poor prognosis.

The CF488-conjugated ErbB2 antibody provides bright, photostable green fluorescence ideal for use in immunofluorescence microscopy and flow cytometry. This format simplifies multi-label assays and enables co-localization studies with other cellular markers. Research applications include quantifying HER2 receptor density, studying receptor trafficking, and visualizing HER2 expression in tumor tissues.

ErbB2 antibody CF488 Conjugate is validated for use in relevant fluorescence-based research applications to detect HER2/ErbB2 in cell and tissue models. NSJ Bioreagents provides this conjugated antibody optimized for studies in cancer signaling, receptor localization, and HER2-targeted therapeutic research.

For broad detection of HER2 (ErbB2) as a receptor tyrosine kinase, see our HER2 antibody.

Application Notes

Optimal dilution of the ErbB2 Antibody CF488 Conjugate should be determined by the researcher.

Immunogen

Recombinant human protein was used as the immunogen for this ErbB2 antibody. Its epitope is localized in the extracellular domain.

Storage

Store the ErbB2 antibody at 2-8oC, protected from light.

Copyright © NSJ Bioreagents. All rights reserved.