

DESCRIPTION

Target:	HER2/ERBB2
Target aliases:	ERBB2, NEU, CD340, NGL, MLN19, VSCN2, TKR1
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag ¹ , disabled Fc- γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc- γ receptor binding site to minimize non-specific antibody binding.

HER2/ERBB2 TARGET INFORMATION

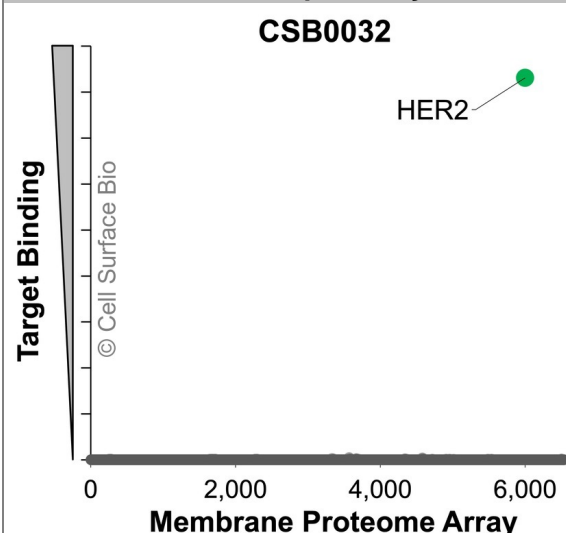
HER2 is a single-pass transmembrane protein and member of the epidermal growth factor (EGF) receptor family. This tyrosine kinase receptor does not have a ligand-binding domain. Instead, HER2 stabilizes ligand binding and enhances activation of signaling pathways by forming a heterodimer with ligand-binding EGF receptor family members. HER2 regulates outgrowth and stabilization of peripheral microtubules and is overexpressed in multiple types of cancer, including breast and ovarian cancers. (NCBI Gene: 2064, UniProtKB/Swiss-Prot: P04626) Other names: ERBB2, NEU, CD340, NGL, MLN19, VSCN2, TKR1

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

Membrane Proteome Specificity



The specificity of HER2/ERBB2 Monoclonal Antibody (CSB0032) was tested on the Membrane Proteome Array™ and shown to be specific for HER2/ERBB2.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml

JS-1 cells transiently transfected with HER2/ERBB2 were stained with HER2/ERBB2 Monoclonal Antibody (CSB0032)(green) or isotype control antibody (gray), followed by AlexaFluor 647-conjugated anti- IgG secondary antibody. JS-1 cells transiently transfected with an empty control vector were also stained with HER2/ERBB2 Monoclonal Antibody (CSB0032)(blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml

(Left) JS-1 cells transiently transfected HER2/ERBB2 were stained with HER2/ERBB2 Monoclonal Antibody (CSB0032) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with HER2/ERBB2 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with HER2/ERBB2 and stained with control MAb.

Applications

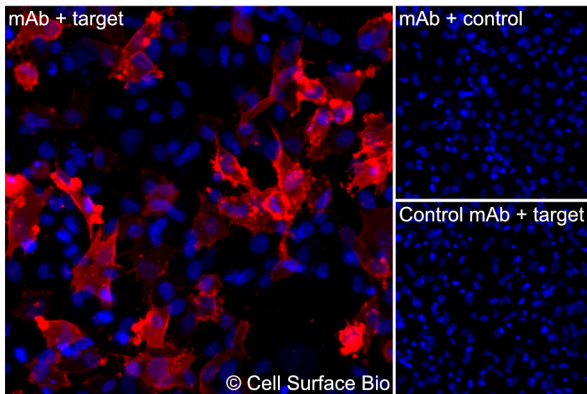
Immunofluorescence, Intracellular

Conditions

Fixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) JS-1 cells transiently transfected HER2/ERBB2 were permeabilized and stained with HER2/ERBB2 Monoclonal Antibody (CSB0032) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with HER2/ERBB2 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with {{target}} and stained with control MAb.