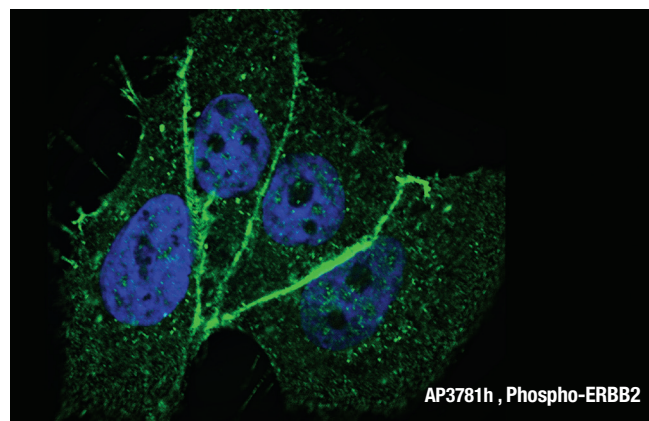
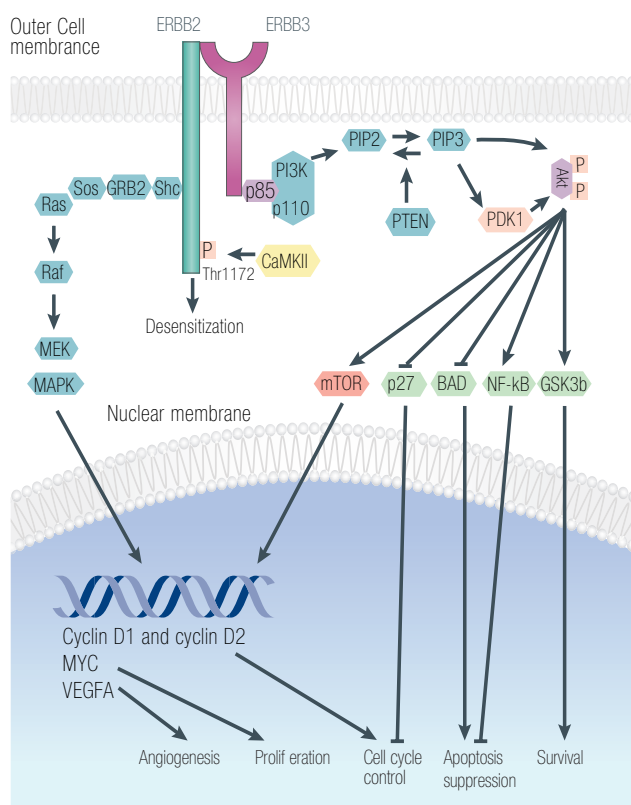


### Introduction

The ErbB2/Neu receptor, also named HER2, belongs to the EGFR (epidermal growth factor receptor)/ ErbB1/HER1 receptor tyrosine kinase (RTK) subfamily, having two additional members, ErbB3/HER3 and ErbB4/HER4 receptors. HER2 plays an important role in the development of certain human cancers by activating MAPK- and PI3K pathway. Down-regulation of RTK activity plays an essential role in coordinating and controlling cellular growth/differentiation. Ca<sup>2+</sup>/calmodulin-dependent kinase II (CaM kinase II)-mediated phosphorylation of threonine 1172 (T1172) in the cytoplasmic tail and inhibits HER2 activity.



Fluorescent image of MCF-7 cells stained with HER2 Antibody # AP3781h. MCF-7 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with HER2 Primary Antibody #AP3781h (1:200, 2h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 5 min). Phospho-HER2 immunoreactivity is localized to plasma membrane of MCF-7 cells.



### Selected Abgent Products

Cat.#	TARGET NAME
AP3781h	Phospho-ERBB2-T1172
AM1848b	AKT2
AP11669a	BTC (N-term)
AP7764c	HRAS (Center)
AP11976a	AKT1 (C-term T450)
AP12164c	PAK6 (Center)
AP3039a	Bad, Phospho-S99
AP3122a	HER4, Phospho-Y1162
AP3159a	MEK1, Phospho-S218/222
AP3254a	SRC, Phospho
AP3268a	STAT5a, Phospho
AP7015a	PKC alpha (C-term)
AP7629a	E_B2 (N-term)
AP9311a	P21Cip1-S130
AP7629e	ErbB2
AP11676b	HRAS Antibody (C-term)

### Visual categorization

Target associated (orange)



Autophagy Stem Cell Neurodegeneration

