

## Product datasheet for TP320500M

### ErbB 4 (ERBB4) (NM\_001042599) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian) (ERBB4), transcript variant JM-a/CVT-2, 100 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA** >RC220500 representing NM\_001042599  
**Clone or AA Sequence:** Red=Cloning site Green=Tags(s)

MKPATGLWWVWVSLVAAGTVQPSDSQSV CAGTENKLSSLS DLEQQYRALRKY YENCEVVMGNLEITSIEH  
NRDLSFLRSVREVTGYVLVALNQFRYLPLENLRIIRG TKLYEDRYALAI FLNRYKDG NFGQLQELGLKNLT  
EILNGGVYVDQNKFLCYADTIHWQDIVRNPWPSNLT LVSTNGSSGCGRCHK SCTGRCWGPTENHCQTLTR  
TVCAEQCDGRCYGPVSDCCHRECAGGCSGPKDTCFACMNFND SGACVTQCPQTFVYNPPTFFQLEHNFN  
AKYTYGAF CVKKCPHNFV DSSSCVRAC PSSKMEVEENG IKMCKPCTDICPKACD GIGTGSLSMAQT VDS  
SNIDKFINCTKINGNLIFLVTGIHGDPYNAIEAIDPEKLN VFRTVREITGFLNIQSWPPNMTDFSVFSNL  
VTIGGRVLYSGLSLILKQQGITS LQFQSLKEISAGNIYITDNSNL CYHTINWTTLFSTINQRIVIRDN  
RKAENCTAEGMVCNHL CSSDGCWGPDPDQCLSCRRFSRGRICIESCNLYDGEFREFENG SICVECDPQCE  
KMEDGLLTCHGPGDNCTKCSHF KDGPNCVEKCPDGLQGANSFIFKYADPDRECHPCHPNCTQGCNGPTS  
HDCIYYPWTGHSTLPQHARTPLIAAGVIGGLFILVIVGLTF AVYVRRKS IKKKRALRRFLETLEVEPLTP  
SGTAPNQAQLRILKETELKRVKVLGSGAFGTVYKGIWVPEGETVKIPVAIKILNETTGPKANVEFMDEAL  
IMASMDHPHLVRL LGVCLSPTIQLVTQLMPHGCLLEYVHEHKDNIGS QLLL NWCVQIAKGM MYLEERRLV  
HRDLAARNVLVKSPNHVKITDFGLARLLEGEKEYNADGGKMPIKWMALECIHYRKFTHQSDVWSYGVTI  
WELMTFGGKPYDGIPTREIPDLLEKGERLPQPPICTIDVYMMVKCWMIDADSRPKFKELAAEF SRMARD  
PQRYLVIQGD DRMKLPSPNDSKFFQNL LDEEDLEDMMDAEEYLV PQA FNIPPIYTSR ARIDSNRNQFVY  
RDGGFAAEQGVSPYRAP TSTIPEAPVAQGATAE IFFDSCCNGTLRKP VAPHVQEDSSTQRYSADPTVFA  
PERSPRGELDEEGYMPMRDKPKQEYLN PVEENPFVSR RKN GDLQALDNPEYHNASNGPPKA EDEYVNEP  
LYLNTFANTLGKAEYLKNNILSMPEKAKKAFDNP DYWNHSLPPRSTLQHPDYLQEYSTKYFYKQNGRIRP  
IVAENPEYLSEFSLKPGTVLPPPPYRHRNTVV

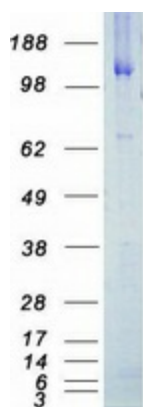
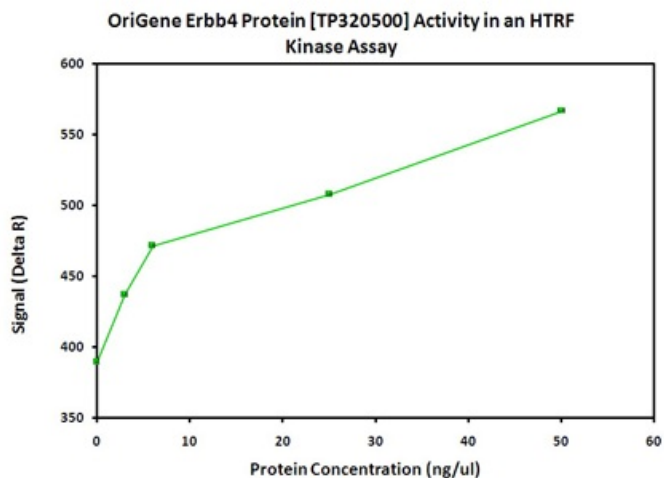
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK  
**Predicted MW:** 142.6 kDa



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<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Bioactivity:</b>	ErbB4 activity verified in a biochemical assay. <b>ErbB4 (v-erb-a erythroblastic leukemia viral oncogene homolog 4)</b> (TP320500) activity was measured in a homogeneous time-resolved fluorescent (HTRF®) assay. ErbB4 is a tyrosine protein kinase and a member of the epidermal growth factor receptor subfamily. Varying concentrations of ErbB4 were added to a reaction mix containing ATP and a biotinylated kinase substrate and the reaction mixture was incubated to allow the protein to phosphorylate the tyrosine residue in the substrate. HTRF detection reagents were then added, and the time-resolved fluorescent signal was measured on a Flexstation 3 microplate reader. The time resolved fluorescent signal is expressed as “delta R” or “ΔR” and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001036064</a>
<b>Locus ID:</b>	2066
<b>UniProt ID:</b>	<a href="#">Q15303</a>
<b>RefSeq Size:</b>	11893
<b>Cytogenetics:</b>	2q34
<b>RefSeq ORF:</b>	3876
<b>Synonyms:</b>	ALS19; HER4; p180erbB4
<b>Summary:</b>	This gene is a member of the Tyr protein kinase family and the epidermal growth factor receptor subfamily. It encodes a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. The protein binds to and is activated by neuregulins and other factors and induces a variety of cellular responses including mitogenesis and differentiation. Multiple proteolytic events allow for the release of a cytoplasmic fragment and an extracellular fragment. Mutations in this gene have been associated with cancer. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Endocytosis, ErbB signaling pathway

**Product images:**

Coomassie blue staining of purified ERBB4 protein (Cat# [TP320500]). The protein was produced from HEK293T cells transfected with ERBB4 cDNA clone (Cat# [RC220500]) using MegaTran 2.0 (Cat# [TT210002]).