

## Product datasheet for TP320500L

### 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, 1 mg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA** >RC220500 representing NM\_001042599  
**Clone or AA Sequence:** Red=Cloning site Green=Tags(s)

MKPATGLWVWVSLVAAGTVQPSDSQSV CAGTENKLSSLS DLEQQYRALRKY YENCEVVMGNLEITSIEH  
NRDLSFLRSVREVTGYVLVALNQFRYLPLENLRIIRG TKLYEDRYALAI FLNRYKDG NFGQLQELGLKNLT  
EILNGGVYVDQNKFLCYADTIHWQDIVRNPWPSNL TLVSTNGSSGCGRCHK SCTGRCWGPTENHCQTLTR  
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AKYTYGAF CVKKCPHNFV DSSSCVRAC PSSKMEVEENG IKMCKPCTDICPKACD GIGTGSLSMAQT VDS  
SNIDKFINCTKINGNLIFLVTGIHGDPYNAIEAIDPEKLN VFRTVREITGFLNIQSWPPNMTDFSVFSNL  
VTIGGRVLYSGLSLLILKQQGITSLQFQSLKEISAGNIYITDNSNL CYHTINWTTLFSTINQRIVIRDN  
RKAENCTAEGMVCNHL CSSDGCWGPDPDQCLSCRRFSRGRICIESCNLYDGEFREFENG SICVECDPQCE  
KMEDGLLTCHGPGDNCTKCSHF KDGPNCVEKCPDGLQGANSFIFKYADPDRECHPCHPNCTQGCNGPTS  
HDCIYYPWTGHSTLPQHARTPLIAAGVIGGLFILVIVGLTF AVYVRRKS IKKKRALRRFLETLEVEPLTP  
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WELMTFGGKPYDGIPTREIPDLLEKGERLPQPPICTIDVYMMVKCWMIDADSRPKFKELAAEF SRMARD  
PQRYLVIQGD DRMKLPSPNDSKFFQNL LDEEDLEDMMDAEEYLVPQAFNIPPIYTSRARIDSNRNQFVY  
RDGGFAAEQGVSPYRAP TSTIPEAPVAQGATAE IFFDSCCNGTLRKPVAPHVQEDSSTQRY SADPTVFA  
PERSPRGELDEEGYMPMRDKPKQEYLN PVEENPFVSRKNGDLQALDNPEYHNASNGPPKA EDEYVNEP  
LYLNTFANTLGKAEYLKNNILSMPEKAKKAFDNP DYWNHSLPPRSTLQHPDYLQEYSTKYFYKQNGRIRP  
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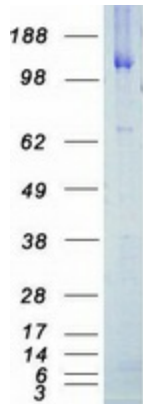
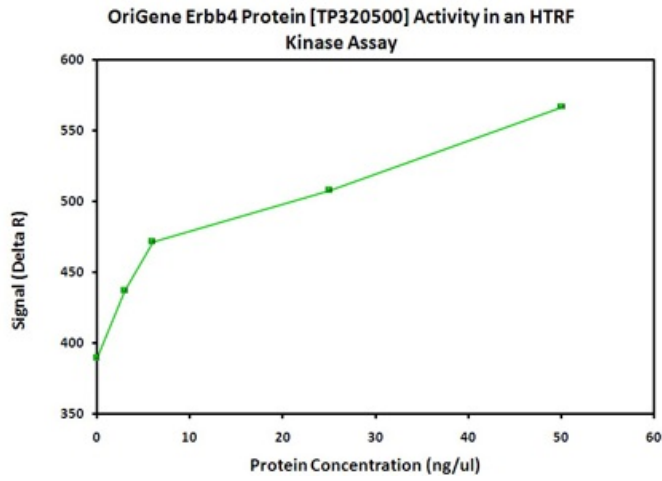
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**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]).