## Recombinant FYN (2-537) protein



Catalog No: 81368, 81668 Expressed In: Baculovirus Quantity: 20, 1000 µg Concentration: 0.1 µg/µl Source: Human

**Buffer Contents:** Recombinant FYN (2-537) protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

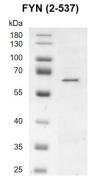
**Background:** FYN (FYN Proto-Oncogene, Src Family Tyrosine Kinase) is a non-receptor tyrosine-protein kinase that plays a role in many biological processes including regulation of cell growth and survival, cell adhesion, integrinmediated signaling, cytoskeletal remodeling, cell motility, immune response and axon guidance. Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain. Following activation by PKA, the protein subsequently associates with PTK2/ FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions. FYN involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (betacatenin) and CTNND1 (delta-catenin) and regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubuleassociated proteins MAP2 and MAPT. It also promotes cell survival by phosphorylating AGAP2/PIKE-A and preventing its apoptotic cleavage. Disieases associated with FYN include Hepatitis E and Autoimmune Cardiomyopathy

**Protein Details:** Recombinant FYN (2-537) protein that includes amino acids 2-537 of human FYN protein (accession number NP\_001357458.1) was expressed in a baculovirus expression system, and contains an N-terminal FLAG tag. The molecular weight of the protein is 61.6 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

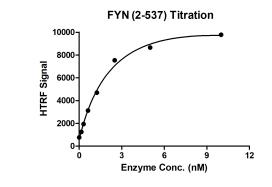
**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of arrival.





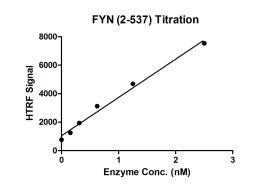
## Recombinant FYN (2-537) protein

10% SDS-PAGE gel with Coomassie blue staining MW: 61.6 kDa Purity: >95%



## HTRF assay for FYN (2-537) activity

1  $\mu$ M TK substrate was incubated with different concentrations of FYN (2 -537) protein in a 10  $\mu$ I reaction system containing 1×Enzymatic Buffer, 5 mM MgCl2, 1 mM DTT and 100  $\mu$ M ATP for 1 hour. Then 10  $\mu$ I detection reagents containing TK antibody (1:2) and SA-XL665 (1:100) diluted with 1× Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection



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