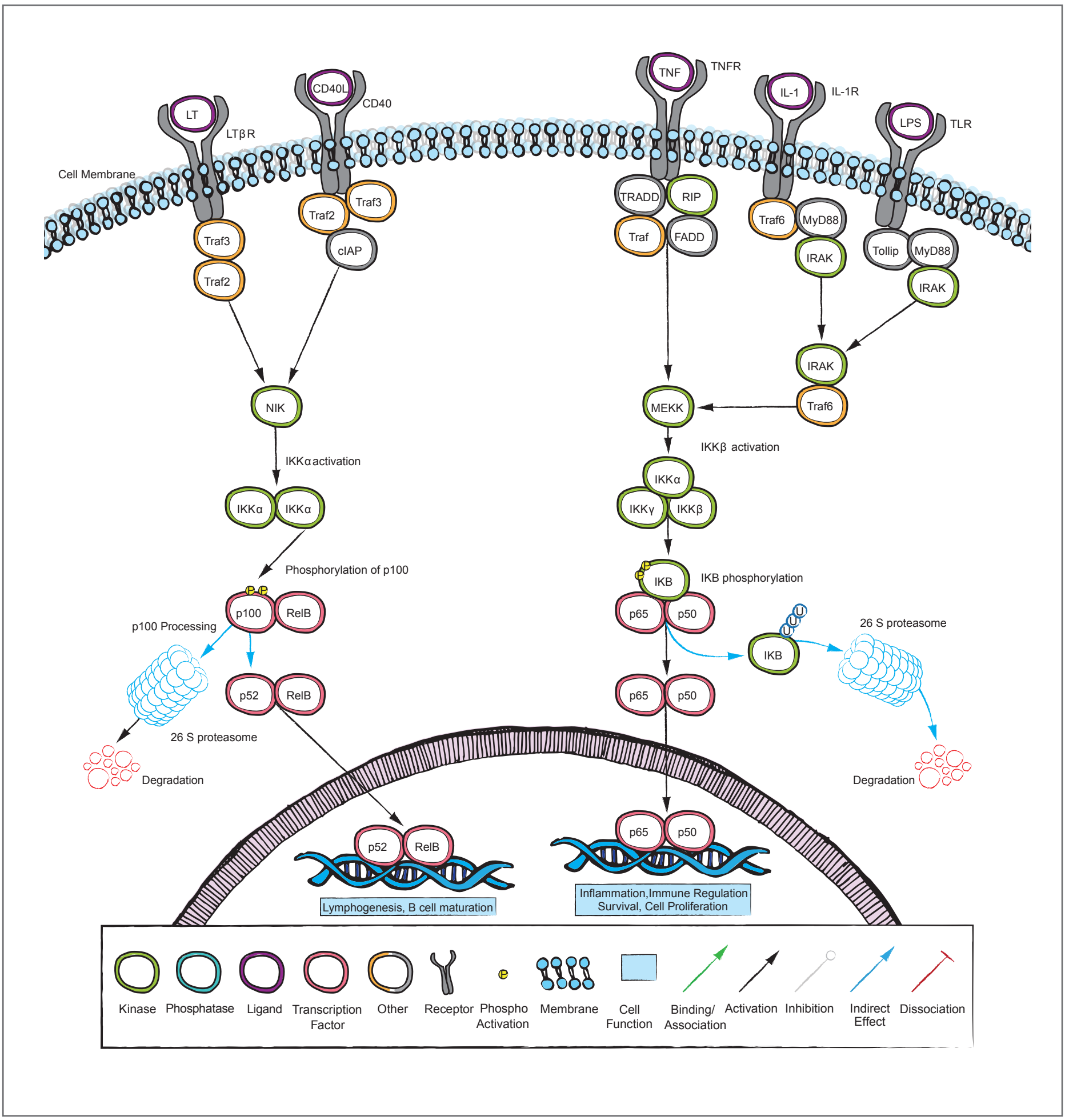
Featured Pathways & Targets

NFkB



The transcription factor nuclear factor NF-κB plays a pivotal role in the regulation of innate and adaptive immunity, stress responses, inflammation, and the inhibition of apoptosis. Under resting conditions, NF-κB dimers are bound to inhibitory IκB proteins, which inactive NF-κB complexes in the cytoplasm. Stimulus-induced degradation of IκB proteins is instigated through phosphorylation by the IκB kinase (IKK) complex, which is kinases, IKKα, IKKβ, IKKγ (NEMO). Phosphorylated IκB proteins are targeted for ubiquitination and proteasomal degradation, which releases the bound NF-κB dimers so they can translocate to the nucleus.