NF-κB Non-Canonical Pathway Antibody Sampler Kit

Cat# AK0204

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Transcription factors of the nuclear factor κ B (NF-κ B)/Rel family play a pivotal role in inflammatory and immune responses. There are five family members in mammals: RelA, RelB, c-Rel, NF-κ B1 (p105/p50) and NF-κ B2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. The p50 and p52 products form dimeric complexes with Rel proteins. While p50 associates with many of the NF-κ B family members, p52 tends to form dimers primarily with RelB. A plethora of stimuli such TNF α and LPS induce the canonical NF-κ B pathway, characterized by the activation of the classical I κ B Kinase (IKK) complex (containing IKK α , IKK β , IKK γ , and ELKS), which then phosphorylates inhibitory I κ B molecules, targeting them for rapid degradation through a ubiquitin-proteasome pathway. The noncanonical pathway, triggered by BAFF, CD40L, and certain other stimuli, is based on the inducible phosphorylation and proteasome-mediated partial degradation of NF-κ B2 p100 to p52, a process regulated by the NF-κ B Inducing Kinase (NIK) and IKK α , but not IKK β or IKK γ . NIK phosphorylates IKK α at Ser176/180 and p100 at Ser866/870, then recruits IKK α to p100 where IKK α phosphorylates additional residues in the N- and C-terminus, leading to the ubiquitination and processing of p100. The TNF Receptor Associated Factor molecules TRAF2 and TRAF3 have been shown to be negative regulators of the noncanonical pathway, and their differential binding to receptors may also play a role in determining whether transduced signals activate the canonical pathway, noncanonical pathway, or both. TRAF3 promotes the rapid turnover of NIK in resting cells, and its activation-induced degradation is a key regulatory point in the pathway. This pathway is required for B cell maturation and activation, proper architecture of peripheral lymphoid tissue, and safeguards against autoimmunity.

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340559	IKK alpha Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340241	Phospho-IKK alpha/beta (Ser176/177) Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340242	Phospho-IKK alpha/beta (Ser180/181) Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit

A340606	NFκB-p100 Polyclonal Antibody	20μL	WB, IHC, IF, IP, ELISA	Human, Mouse, Rat	Rabbit
A340133	MAP3K14 Polyclonal Antibody	20μL	WB, IHC, ELISA	Human, Mouse	Rabbit
A340130	RELB Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse	Rabbit
A340689	TRAF2 Polyclonal Antibody	20μL	WB, IHC, ELISA	Human	Rabbit
A340690	TRAF3 Polyclonal Antibody	20μL	WB, ELISA	Human, Mouse	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.