

# Validation data for Amlexanox

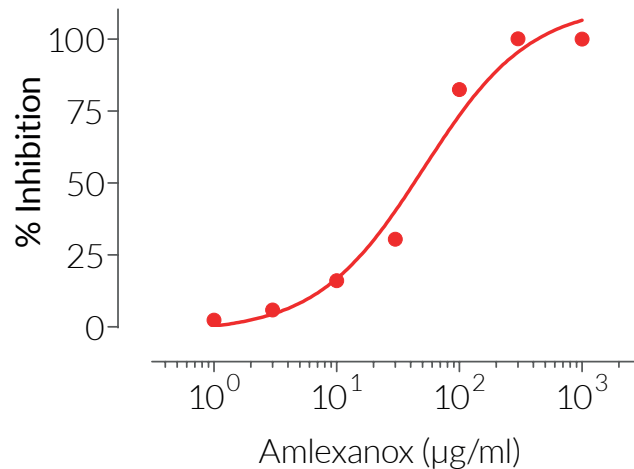
<https://www.invivogen.com/amlexanox>

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Amlexanox is a specific inhibitor of the noncanonical I $\kappa$ B kinases TANK-binding kinase 1 (TBK1) and I $\kappa$ B kinase-epsilon (IKK $\epsilon$ ). IKK $\epsilon$  and TBK1 are essential players in the coordination of interferon regulatory factor 3 (IRF3)- and NF- $\kappa$ B-mediated inflammatory signaling pathways. The ability of Amlexanox to inhibit TBK1/IKK $\epsilon$  signaling was validated using InvivoGen's B16-Blue™ ISG reporter cells (Figure 1). These cells stably express an IRF-inducible SEAP (secreted embryonic alkaline phosphatase) reporter gene. They can be used to study the activation of the TBK1/IRF3 pathway by cytosolic DNA, dsRNA or cyclic dinucleotides (CDNs).

## Dose-dependent inhibition of TBK1/IKK $\epsilon$ signaling



**Figure 1: Amlexanox is a potent inhibitor of TBK1/IKK $\epsilon$  signaling pathways.**

B16-Blue™ ISG cells were incubated overnight at 37°C in the presence of increasing concentrations of Amlexanox together with 5  $\mu\text{g/ml}$  of poly(dA:dT) complexed with the transfection reagent LyoVec™. The next day, the inhibitory activity of Amlexanox was determined by measuring the reduction of SEAP production in the supernatant using the QUANTI-Blue™ Solution detection reagent. Data are shown as percentage (%) inhibition.

### TECHNICAL SUPPORT

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