Store at -20°C

Poly(I:C) Sodium Salt

#61401

25 mg

Cell Signaling TECHNOLOGY®

Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/support

Orders: 877-616-2355 (U.S.)
orders@cellsignal.com

New 07/20

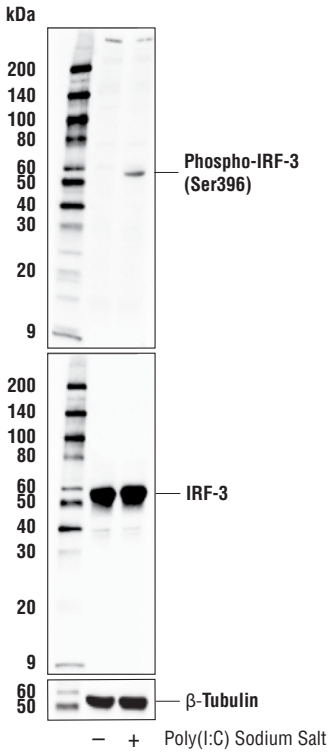
For Research Use Only. Not For Use In Diagnostic Procedures.

Background: Poly(I:C) Sodium Salt, also known as polyinosinic-polycytidylic acid sodium salt, is a synthetic analog to double-stranded RNA (dsRNA) and potent activator of Toll-like receptor 3 (TLR3). The Toll-like receptor (TLR) family plays an important role in the innate immune response (1). TLR3 functions as a receptor for dsRNA typically associated with viral infection (2). Binding of dsRNA, or the analog Poly(I:C), to TLR3 triggers activation of transcription factors NF-κB and IRF3 through the adaptor protein TICAM-1/TRIF (3,4). Studies have shown that combination treatment with Poly(I:C) can increase vaccine immunogenicity against viral and cancerous diseases (5,6).

Purity: >98%

CAS: 42424-50-0

Solubility: Soluble in water at 10 mg/ml with warming.



Western blot analysis of extracts from THP-1 cells differentiated with TPA (12-O-Tetradecanoylphorbol-13-Acetate) #4174 (80 nM, 18 hr) and then untransfected (-) or transfected with Poly(I:C) Sodium Salt (5 µg/ml, 6 hr; +), using Phospho-IRF-3 (Ser396) (4D4G) Rabbit mAb #4947 (upper), IRF-3 (D6I4C) XP® Rabbit mAb #11904 (middle), or β-Tubulin (D2N5G) Rabbit mAb #15115 (lower).

Storage: Store lyophilized at -20ºC, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20ºC. *Aliquot to avoid multiple freeze/thaw cycles.*

Directions for Use: Poly(I:C) Sodium Salt is supplied as a lyophilized powder. To prevent denaturation, reconstitute in water containing physiological salt concentrations. Working concentrations and length of treatment can vary depending on the desired effect.

Background References:

(1) Alexopoulou, L. et al. (2001) *Nature* 413, 732-8.

(2) Medzhitov, R. et al. (1997) *Nature* 388, 394-7.

(3) Horng, T. et al. (2001) *Nat Immunol* 2, 835-41.

(4) Oshiumi, H. et al. (2003) *Nat Immunol* 4, 161-7.

(5) Liu, C. et al. (2018) *Hum Vaccin Immunother* 14, 931-40.

(6) Zhou, C.X. et al. (2014) *BMC Vet Res* 10, 2.

Thank you for your recent purchase. If you would like to provide a review visit cellsignal.com/comments.

www.cellsignal.com

Applications: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity:** **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.