

GADD34 antibody (rAb), 100 µl

Catalog No: 91609**Clone:** 4K3**Application(s):** WB**Reactivity:** Human, Mouse**Volume:** 100 µl**Purification:** Protein A Chromatography**Host:** Rabbit**Isotype:** IgG**Molecular Weight:** 73 kDa

Background: **GADD34**, also named PPP1R15A, belongs to the PPP1R15 family. **GADD34** can be triggered as a direct target of activating transcription factor4 (ATF4) under ER stress, it plays a pivotal role in the recovery of cells from shut-down of translation induced by ER stress. It recruits the serine/threonine-protein phosphatase (PP1) to dephosphorylate the translation initiation factor eIF2alpha, thereby reversing the shut-off of protein synthesis initiated by stress-inducible kinases and facilitating recovery of cells from stress. **GADD34** down-regulates the TGF-beta signaling pathway by promoting dephosphorylation of TGFB1 via PP1. It may also promote apoptosis by inducing TP53 phosphorylation on 'Ser-15'. Starvation-induced expression of **GADD34** reduced mTOR activity and induced autophagy in wild-type mice, but not in GADD34 KO mice.

Immunogen: This antibody was raised against the GADD34 fusion protein.

Buffer: Purified IgG in PBS, pH 7.3, with 50% glycerol and 0.02% sodium azide. Sodium azide is highly toxic.

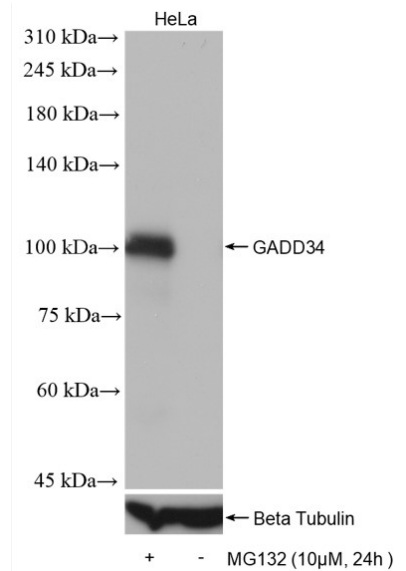
Application Notes:

Applications Validated by Active Motif:

WB: 1:2000-1:16000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**GADD34 antibody (rAb) tested by Western blot.**

Detection of GADD34 by Western blot analysis using various lysates and probed with GADD34 antibody at 1:4000 dilution.