Datasheet for ABIN1882116

anti-PIAS3 antibody (N-Term)

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Overview

Quantity:	400 µL
Target:	PIAS3
Binding Specificity:	AA 95-126, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIAS3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This PIAS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-126 amino acids from the N-terminal region of human PIAS3.
Clone:	RB0671
Isotype:	Ig Fraction
Predicted Reactivity:	M, Rat
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	PIAS3

Target Details

Alternative Name:	PIAS3 (PIAS3 Products)
Background:	PIAS3 is a member of the PIAS [protein inhibitor of activated STAT (signal transducer and activator of transcription)] family of transcriptional modulators. The protein functions as a SUMO (small ubiquitin-like modifier)-E3 ligase stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor, catalyzing the covalent attachment of a SUMO protein to specific target substrates. PIAS3 plays a crucial role as a transcriptional coregulator in various cellular pathways, including the STAT pathway and the steroid hormone signaling pathway. The effects of this transcriptional coregulation, transactivation or silencing, may vary depending upon the biological context.
Molecular Weight:	68017
NCBI Accession:	NP_006090
UniProt:	Q9Y6X2
Pathways:	JAK-STAT Signaling

Application Details

Application Notes:	WB: 1:1000. IHC-P: 1:50~100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Publications

Product cited in:	Spoden, Morandell, Ehehalt, Fiedler, Jansen-Dürr, Hermann, Zwerschke: "The SUMO-E3 ligase PIAS3 targets pyruvate kinase M2." in: **Journal of cellular biochemistry**, Vol. 107, Issue 2, pp. 293-302, (2009) (PubMed).

Publications

Brantley, Nabors, Gillespie, Choi, Palmer, Harrison, Roarty, Benveniste: "Loss of protein inhibitors of activated STAT-3 expression in glioblastoma multiforme tumors: implications for STAT-3 activation and gene expression." in: **Clinical cancer research : an official journal of the American Association for Cancer Research**, Vol. 14, Issue 15, pp. 4694-704, (2008) (PubMed).

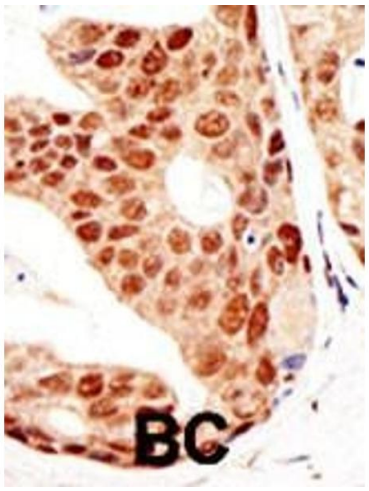
Iwasaki, Hailemariam, Tsuji: "PIAS3 interacts with ATF1 and regulates the human ferritin H gene through an antioxidant-responsive element." in: **The Journal of biological chemistry**, Vol. 282, Issue 31, pp. 22335-43, (2007) (PubMed).

Nojiri, Joh, Miura, Sakata, Nomura, Nakao, Sobue, Ohara, Asai, Ito: "ATBF1 enhances the suppression of STAT3 signaling by interaction with PIAS3." in: **Biochemical and biophysical research communications**, Vol. 314, Issue 1, pp. 97-103, (2004) (PubMed).

Long, Wang, Matsuura, He, Liu: "Activation of Smad transcriptional activity by protein inhibitor of activated STAT3 (PIAS3)." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 101, Issue 1, pp. 99-104, (2004) (PubMed).

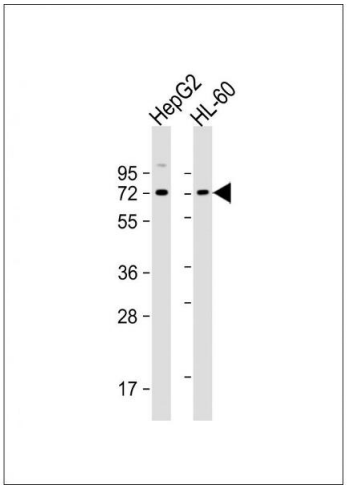
There are more publications referencing this product on: Product page

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.



Western Blotting

Image 2. All lanes : Anti-PIAS3 Antibody (N-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.

