10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-14-3-3 sigma Picoband Antibody

Catalog # ABO10154

Specification

Anti-14-3-3 sigma Picoband Antibody - Product Information

Application	**WB, E**
Primary Accession	P31947
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for 14-3-3 sigma detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-14-3-3 sigma Picoband Antibody - Additional Information

Gene ID 2810

Other Names
14-3-3 protein sigma, Epithelial cell marker protein 1, Stratifin, SFN, HME1

Application Details
Western blot, 0.1-0.5 µg/ml
 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Cytoplasm. Nucleus . Secreted. May be secreted by a non-classical secretory pathway.

Tissue Specificity
Present mainly in tissues enriched in stratified squamous keratinizing epithelium.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
E. coli-derived human 14-3-3 sigma recombinant protein (Position: M1-S248).

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.**

Anti-14-3-3 sigma Picoband Antibody - Protein Information

Name SFN

Synonyms HME1 {ECO:0000303|PubMed:1390337}

Function
Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:15731107, PubMed:22634725, PubMed:28202711, PubMed:37797010). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:15731107, PubMed:22634725, PubMed:28202711, PubMed:37797010). Binding generally results in the modulation of the activity of the binding partner (PubMed:15731107, PubMed:22634725, PubMed:28202711, PubMed:37797010). Promotes cytosolic retention of GBP1 GTPase by binding to phosphorylated GBP1, thereby inhibiting the innate immune response (PubMed:37797010). Also acts as a TP53/p53-regulated inhibitor of G2/M progression (PubMed:9659898). When bound to KRT17, regulates protein synthesis and epithelial cell growth by stimulating Akt/mTOR pathway (By similarity). Acts to maintain desmosome cell junction adhesion in epithelial cells via interacting with and sequestering PKP3 to the cytoplasm, thereby restricting its translocation to existing desmosome structures and therefore maintaining desmosome protein homeostasis (PubMed:24124604). Also acts to facilitate PKP3 exchange at desmosome plaques, thereby maintaining keratinocyte intercellular adhesion (PubMed:29678907). May also regulate MDM2 autoubiquitination and degradation and thereby activate p53/TP53 (PubMed:18382127).

Cellular Location
Cytoplasm. Nucleus {ECO:0000250|UniProtKB:O70456} Secreted. Note=May be secreted by a non- classical secretory pathway.

Tissue Location
Present mainly in tissues enriched in stratified squamous keratinizing epithelium.

Anti-14-3-3 sigma Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-14-3-3 sigma Picoband Antibody - Images

Anti-14-3-3 sigma Picoband Antibody - Background

Stratifin(SFN), also known as 14-3-3 protein sigma, is strongly induced by gamma irradiation and other DNA-damaging agents. The induction of 14-3-3-sigma is mediated by a p53 -responsive element located 1.8 kb upstream of its transcription start site. The protein, called stratifin, was shown to be diffusely distributed in the cytoplasm and was present in cultured epithelial cells. It was most abundant in tissues enriched in stratified keratinizing epithelium.