

## Technical Data Sheet

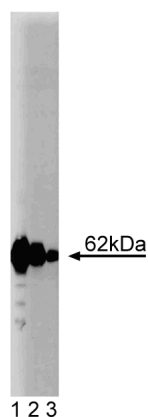
## Purified Mouse Anti-p62 Ick ligand

## Product Information

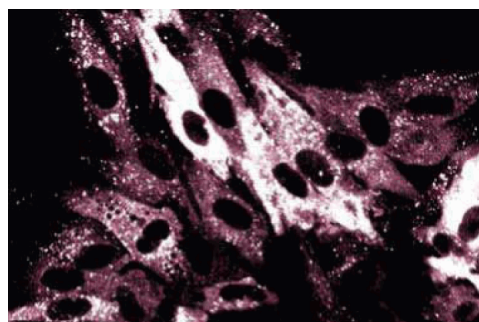
<b>Material Number:</b>	<b>610832</b>
<b>Alternate Name:</b>	Zeta Interacting Protein (ZIP); SQSMT1
<b>Size:</b>	50 µg
<b>Concentration:</b>	250 µg/ml
<b>Clone:</b>	3/P62 LCK LIGAND
<b>Immunogen:</b>	Human p62 Ick ligand aa. 257-437
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Target MW:</b>	62 kDa
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

## Description

p62 Ick ligand (zeta-interacting protein (ZIP)) is a cytoplasmic protein that binds to the SH2 domain of Ick (a T cell src tyrosine kinase) in the absence of a phosphotyrosine in either protein. The ubiquitously expressed p62 Ick ligand contains a cysteine rich region that is similar to a zinc finger domain, a G protein binding region, a PEST sequence, and several phosphorylation sites. Deletion of the p62 Ick ligand N-terminal domain has been reported to abrogate its binding to Ick. However, mutation of the tyrosine did not have an effect. In addition, p62 Ick ligand binds to the pseudosubstrate region of the PKCζ catalytic domain. In turn, PKCζ phosphorylates p62. p62 Ick ligand binds to the dimerization region of PKCζ, thereby inhibiting PKCζ-PKCζ interaction. This suggests that p62 Ick ligand may compete with PKCζ. However, it requires PKCζ for proper subcellular localization. These data suggest that p62 Ick ligand may be part of the protein bridge that links PKCζ to the tyrosine kinases involved in signaling pathways.



**Western blot analysis of p62 Ick ligand on a HCT-8 (human colorectal adenocarcinoma; ATCC CCL-244) cell lysate.** Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the anti-p62 Ick ligand antibody.



**Immunofluorescence staining on FHS cells (normal human fetal lung fibroblasts; ATCC HTB-157).**

## Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Application Notes

## Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

## BD Biosciences

bdbiosciences.com

<b>United States</b>	<b>Canada</b>	<b>Europe</b>	<b>Japan</b>	<b>Asia Pacific</b>	<b>Latin America/Caribbean</b>
877.232.8995	866.979.9408	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

*Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.*

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2015 BD

610832 Rev. 2



## Suggested Companion Products

Catalog Number	Name	Size	Clone
611474	HCT-8 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1 mL	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

Bjørkøy G, Lamark T, Pankiv S, Øvervatn A, Brech A, Johansen T. Monitoring autophagic degradation of p62/SQSTM1. *Methods Enzymol.* 2009; 452:181-197. (Clone-specific)

Cariou B, Perdereau D, Cailliau K, et al. The adapter protein ZIP binds Grb14 and regulates its inhibitory action on insulin signaling by recruiting protein kinase Czeta. *Mol Cell Biol.* 2002; 22(20):6959-6970. (Biology: Western blot)

Joung I, Strominger JL, Shin J. Molecular cloning of a phosphotyrosine-independent ligand of the p56lck SH2 domain. *Proc Natl Acad Sci U S A.* 1996; 93(12):5991-5995. (Biology: Western blot)

Puls A, Schmidt S, Grawe F, Stabel S. Interaction of protein kinase C zeta with ZIP, a novel protein kinase C-binding protein. *Proc Natl Acad Sci U S A.* 1997; 94(12):6191-6196. (Biology)

Wooten MW, Seibenhener ML, Mamidipudi V, Diaz-Meco MT, Barker PA, Moscat J. The atypical protein kinase C-interacting protein p62 is a scaffold for NF-kappaB activation by nerve growth factor. *J Biol Chem.* 2001; 276(11):7709-7712. (Biology: Immunoprecipitation, Western blot)

## BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	866.979.9408	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2015 BD

610832 Rev. 2

