

PRESENTATION

# PROTEINTECH GROUP: AN OVERVIEW

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[www.ptglab.com](http://www.ptglab.com)

PROTEINTECH GROUP: AN OVERVIEW

# INTRODUCTION TO PROTEINTECH GROUP

## COMPANY PROFILE

### Mission Statement

- Founded in 2001 by a group of scientists at University of Illinois.
- Proteintech products now have over 20,000 publication citations.
- Winner of 'Most Exciting Antibody Validation Initiative 2016'.
- ISO 9001 and 1345 accredited.



## PRODUCT RANGES

- **Antibodies against 12,000 human targets available.**
- **Growing range of Sandwich ELISA kits.**
- **12,000 fusion proteins also available.**
- **Custom production antibody service.**

## PROTEINTECH: ORIGINAL MANUFACTURER, ORIGINAL PRODUCTS

- Proteintech make every single antibody in its 12,000+ catalog.
- Products exclusively available to buy through Proteintech and its approved distributors.
- Each antibody is unique and cannot be bought under a different label.

PROTEINTECH GROUP: AN OVERVIEW

# TECHNICAL ADVANTAGES OF PROTEINTECH ANTIBODIES



## WHOLE PROTEIN APPROACH

The Proteintech whole protein approach involves expressing a large section, or even all of the protein where possible. This is because whole protein antigens more closely resemble the native protein, and epitopes are presented in all possible manners, thus yielding better antibodies.

The advantages of whole-protein antibodies include:

- **Wider applicability.**
- **Higher binding sensitivity and affinity.**
- **Superior recognition of native, intact proteins.**

### Natural Selection Of Optimum Epitopes

Major histocompatibility complex (MHC) class II molecules found on the surface of antigen presenting cells (APCs) are experts at epitope selection. They have been optimized by nature for this role over millions of years. The binding-groove of the MHC class II molecule is adapted to select the epitopes with the best chances of eliciting an immune response; thus protein antigens enable the molecule to perform as nature intended, whereas peptide antigens 'force' MHC class II molecules the limited binding conformations offered by synthetic peptides.

## 102 DAY IMMUNIZATION PROTOCOL

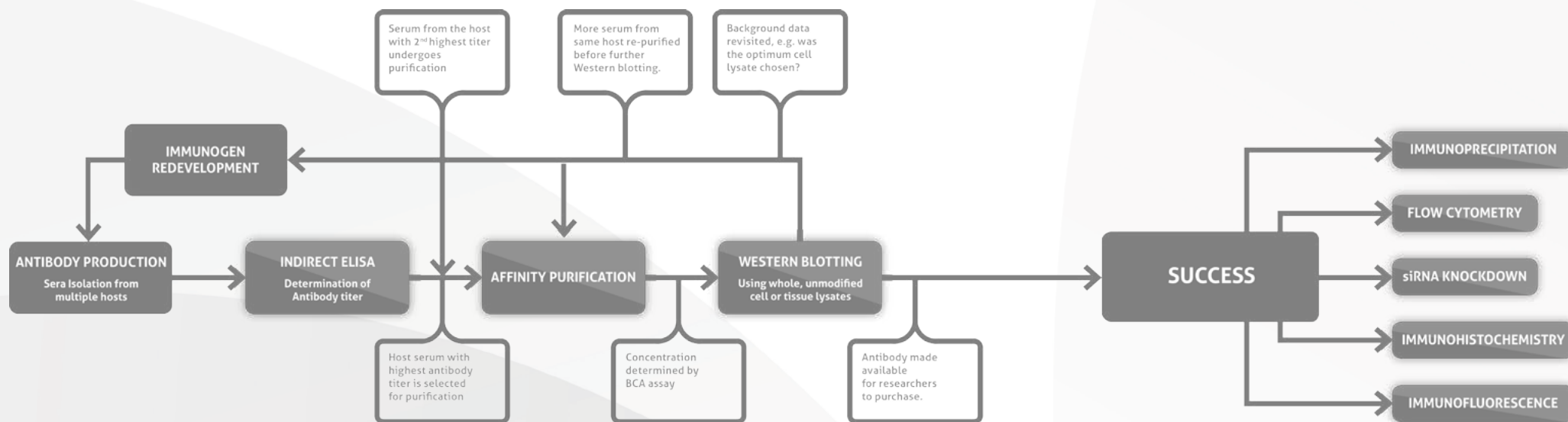
The lab employs a 102 day-long immunization protocol as standard, supplemented with booster immunizations to emulate a realistic immune response.

### **Affinity Maturation**

The means by which antibody affinity is enhanced is a microevolutionary process called affinity maturation, which happens in the peripheral immune system. Though an initial population of B-cells produce antibodies with sufficient affinity for activation by T-cells, the affinity of these antibodies is not yet high enough to facilitate an effective immune response. Through somatic hypermutation and competitive selection processes, the sensitivity and affinity of an antibody population is improved greatly.



## STRINGENT VALIDATION PROCESS



## STRINGENT VALIDATION PROCESS

- Every Proteintech antibody has been extensively validated by the in-house team in a wide range of applications.
- Original validation data available to the researcher on request.
- Antibodies validated with siRNA knockdown to demonstrate specificity.

## THE BENCHMARK IN ANTIBODIES

Antibodies validated with siRNA  
knockdown to demonstrate specificity.

Look out for the **Tested with siRNA** icon when searching  
for your antibody to ensure it is specific.

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# SERVING THE SCIENTIST

## PROTEINTECH GUARANTEE

**How can Proteintech help? It's your choice.**

Option 1: PhD-level Technical Support	Option 2: Proteintech Guarantee
Dedicated PhD trained technical support available worldwide.	A full money back refund inc the shipping cost.
Solutions based on your individual experiment, rather than generic advice.	Or we can send you a replacement or credit.
Support available online via 24 hours a day.	No complicated forms to fill in.
Original validation data available on request.	No requirement to ship the faulty antibody back.
	Covers the antibody in any species and any application.

## KEY USPs OF PROTEINTECH

- **No OEM**  
Every antibody is manufactured by Proteintech and cannot be bought under a different label.
- **Validation**  
We do not sell any antibody that hasn't passed western blot testing on whole, unmodified cell or tissue lysates.
- **siRNA**  
We are validating our antibodies with siRNA knockdown to demonstrate specificity. This has been performed on 1000 of our products so far.
- **Guarantee**  
Proteintech antibodies are guaranteed in any species and any application as standard.
- **Publications**  
Proteintech antibodies have been cited in 20,000 publications, which is a strong indicator of our quality.

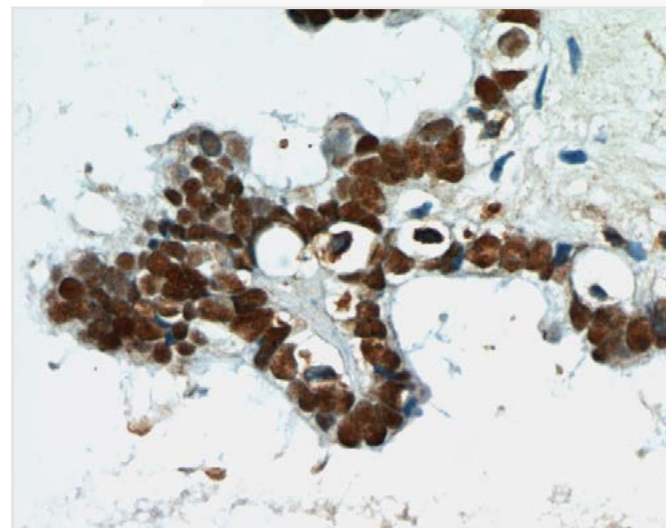
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# TOP PRODUCTS



## PAX8 & CANCER RESEARCH

- **Related Research**  
Ovarian tumour, kidney organogenesis & carcinoma, thyroid research, pancreatic tumours, neural development.
- **Catalogue Number**  
10336-1-AP
- **Publication Count**  
185 publications
- **Tested Applications**  
ELISA, FC, IF, IHC, IP, WB
- **Knockdown Validated**  
Yes
- **Related Catalogue Link**  
[http://www.ptglab.com/media/2401/1503398\\_new-catalogue-covers\\_cancer-research\\_uk\\_web-version.pdf](http://www.ptglab.com/media/2401/1503398_new-catalogue-covers_cancer-research_uk_web-version.pdf)



## TDP43 & NEURODEGENERATION RESEARCH

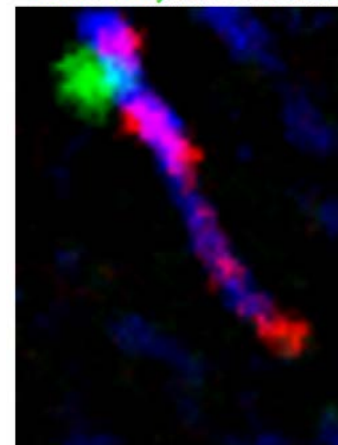
- **Related Research**  
FTD, ALS & dementia.
- **Catalogue Number**  
10782-2-AP
- **Publication Count**  
765 publications
- **Tested Applications**  
ChIP, CoIP, ELISA, FC, IF, IHC, IP, RIP, WB
- **Knockdown Validated**  
Yes
- **Related Products**  
C9orf72 dipeptide repeat antibodies'
- **Related Catalogue Link**  
[http://www.ptglab.com/media/2400/1503398\\_new-catalogue-covers\\_neuroscience\\_uk\\_web-version.pdf](http://www.ptglab.com/media/2400/1503398_new-catalogue-covers_neuroscience_uk_web-version.pdf)



## CILIA RESEARCH: ARL13B

- **Related Research**  
Ciliopathies (PCD), developmental biology & disorders (such as Joubert syndrome), cellular signalling.
- **Catalogue Number**  
17711-1-AP
- **Publication Count**  
107 publications
- **Tested Applications**  
ELISA, FC, IF, IHC, IP, WB
- **Knockdown Validated**  
Yes
- **Related Products**  
IFT88, well published range of TMEMS & BBS proteins.
- **Related Catalogue Link**  
<http://www.ptglab.com/media/1625/ciliazcard.pdf>

Basal body/ARL13B/cilia



Mouse embryonic fibroblasts

## TAG & CONTROL ANTIBODY PROMOTION

Loading control proteins and protein tags provide a reference to evaluate the changes in expression levels of target proteins and help to ensure that any increase or decrease in target protein levels is due to your experimental manipulations, and not due to errors in the Western blot procedure.

Antibody Name	Catalogue Number	Type	Applications
alpha Tubulin	66031-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, WB
beta Tubulin	66240-1-Ig	Mouse Mono	ELISA, IF, IHC, IP, WB
gamma Tubulin	66320-1-Ig	Mouse Mono	ELISA, IF, WB
beta Actin	60008-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, WB
beta Actin	66009-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, IP, WB
GAPDH	60004-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, IP, WB
6*HIS-Tag	66005-1-Ig	Mouse Mono	ELISA, IF, IP, WB
Flag-Tag	66008-2-Ig	Mouse Mono	ELISA, WB
GFP-Tag	66002-1-Ig	Mouse Mono	ELISA, IF, IP, WB
MBP-Tag	66003-1-Ig	Mouse Mono	ELISA, IP, WB
MYC-Tag	66004-1-Ig	Mouse Mono	ELISA, IF, IP, WB
V5-Tag	66007-1-Ig	Mouse Mono	ELISA, IP, WB
Vinculin	66305-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, WB
COXIV	60251-1-Ig	Mouse Mono	ELISA, FC, IF, IHC, WB
TBP	66166-1-Ig	Mouse Mono	ELISA, IF, IHC, IP, WB

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# ADDITIONAL PRODUCTS

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### ELISA Kits

Over 100 sandwich ELISA kits exclusively available from Proteintech.

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### Fusion Proteins

Over 4000 recombinant proteins available in lyophilised form. Suitable for use in blocking experiments and as positive controls.

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### Custom Production

Proteintech offers a range of polyclonal custom production services:

- **#91246 – Peptide Antigen service**  
Includes: Peptide design consultation, peptide synthesis, immunization of two hosts and affinity purification.
- **#90186 – Fusion Protein Antigen service**  
Includes: Protein expression, immunization of two hosts and affinity purification.
- **#90136 – Fusion Protein Antigen service + Cloning**  
Includes: Cloning, protein expression, immunization of two hosts and affinity purification.

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#### Notes

- Antibodies can be raised against phosphorylated or acetylated targets.
- Antibodies can be raised in Rabbit, Mouse or Guinea pig.
- Proteintech does not accept customer produced proteins.





## FAQs

**Q: Do you provide samples?**

**A: No, instead we have our guarantee so if there are any issues the customer can have a refund or replacement.**

**Q: The antibody has not been tested in x species?**

**A: We can BLAST the homology of our immunogen with the x species protein. We recommend polyclonals for cross reactivity where there is >70% homology. We also have our any species guarantee.**

**Q: Different buffer or concentration etc?**

**A: We can offer a range of product modifications but this usually requires a minimum purchase of five vials and the delivery time is lengthened.**

**Q: Discount?**

**A: Usually only offered on bulk orders of over 10 units.**

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# WHAT RESEARCHERS THINK OF PROTEINTECH GROUP

## TESTIMONIALS

**'Specific antibodies that work!'**

- Dr. Jose A. Morales García, Instituto de Investigaciones Biomédicas A. Sols.

**'The antibody works very good (ARL13B - 17711-1-AP). I will soon be ordering more since I'm doing quite a lot of staining. Thanks again for your support, I will definitively recommend this antibody when working with cilia.'**

- Paolo Prosseda, University of Sheffield.

**'Great trust-worthy products with stellar customer support.'**

- Pleasantine Mill, University of Edinburgh.

**'Proteintech is a company with reliable and high quality products for a gambit of different applications.'**

- Bruno Sainz, Autónoma University of Madrid.

**'The antibody functioned very well (15981-1-AP). We used it at a dilution of 1:500 with consistent, clean and reproducible detection of the monomeric ISG15 protein and the conjugated (i.e. isglylated) cellular protein complexes.'**

- Bruno Sainz, Autónoma University of Madrid.

## PUBLICATIONS

- Proteintech products now have over 20,000 publication citations.
- Publication authors receive a free antibody of their choice when they publish with Proteintech.

**lubio**  
**science**

### Your distributor in Switzerland

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