

Protein-Protein Interaction Antibody Pair

A powerful platform for protein-protein interaction studies *in situ* is created by combining Abnova's dual recognition, primary antibody pair with Proximity Ligation Assay (PLA™). This revolutionary combination enables unprecedented specificity and sensitivity of detection and quantification for high performance immunofluorescence application. Many target specific and validated have been developed. Abnova plans to introduce up to 1000 protein-protein interaction antibody pairs by end of 2009. Please check website for regular product update.

Characteristics of Proximity Ligation Assay

- Detect and quantify interacting molecules *in situ*
- Improve detection specificity and sensitivity
- Ensure localization of sub-cellular events
- Work with native molecules at physiological expression levels
- Reduce risk of missing weak or transient interactions

Antibody Pair and Detection Accessories

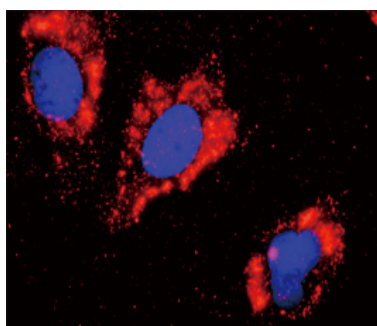
- Two target-specific primary antibodies from two different host species (mouse and rabbit).
- Detection accessories:
 - Catalog # U0012 Mouse PLUS and Rabbit MINUS Complete *in situ* PLA™ Kit
 - Catalog # 90701 PLA probe 30 Mouse PLUS
 - Catalog # 90602 PLA probe 30 Rabbit MINUS
 - Catalog # 90133 Duolink® 30 Detection Kit 613
 - Catalog # 80100 Duolink Mounting Medium (recommend).

Application

- *In situ* Proximity Ligation Assay

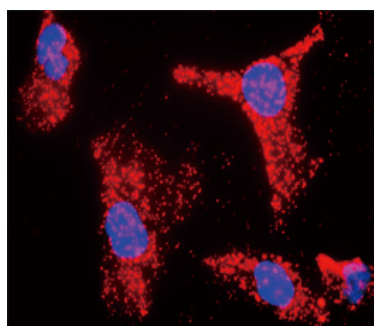
Protein-Protein Interaction Studies

Product Name: FLT1 & CTNNB1 Protein Protein Interaction Antibody Pair
Catalog #: DI0010



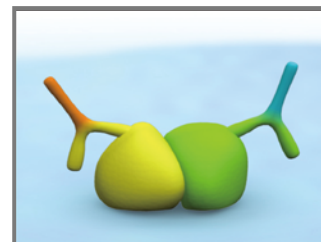
Huh7 cells were stained with anti-FLT1 rabbit purified polyclonal antibody and anti-CTNNB1 mouse monoclonal antibody. Signals were detected by Duolink 100 Detection Kit 613 (red), and nuclei were counterstained with DAPI (blue). Each red dot represents the detection of protein-protein interaction complex.

Product Name: SNCA & BAX Protein Protein Interaction Antibody Pair
Catalog #: DI0070

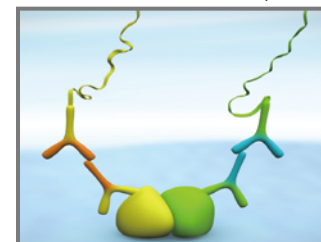


HeLa cells were stained with anti-SNCA rabbit purified polyclonal antibody and anti-BAX mouse monoclonal antibody. Signals were detected by Duolink® 100 Detection Kit 613 (red), and nuclei were counterstained with DAPI (blue). Each red dot represents the detection of protein-protein interaction complex.

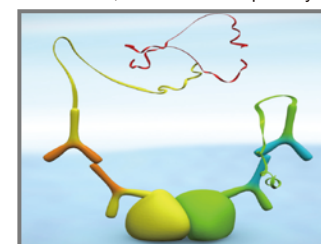
Principle of PLA™



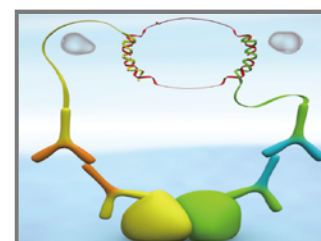
1. Incubate with target primary antibodies from two different species.



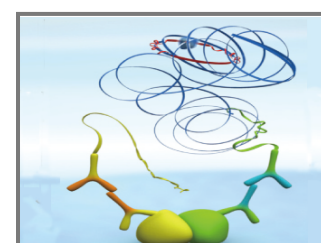
2. Add two PLA probes, each a species-specific secondary antibody with a short DNA strand, to bind to each primary Ab.



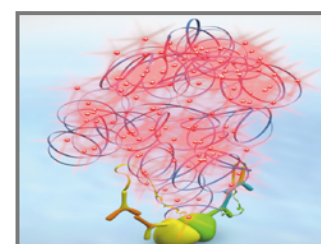
3. When secondary antibodies are in close proximity (<40 nm), the DNA strands interact (hybridize) with the added circle-forming DNA oligonucleotides.



4. Ligation to form a complete DNA circle



5. Rolling circle amplification



6. Add fluorescent probes to reveal interaction

Protein-Protein Interaction Antibody Pair

Catalog #	Product Name
DI0088	AKT1 & CDKN1A Protein Protein Interaction Antibody Pair
DI0097	AKT1 & CHUK Protein Protein Interaction Antibody Pair
DI0026	AKT1 & HSPB1 Protein Protein Interaction Antibody Pair
DI0005	AKT1 & MAPK14 Protein Protein Interaction Antibody Pair
DI0032	AKT1 & PDPK1 Protein Protein Interaction Antibody Pair
DI0011	AKT1 & SMAD4 Protein Protein Interaction Antibody Pair
DI0100	ARRB2 & CHUK Protein Protein Interaction Antibody Pair
DI0068	BCL2L1 & BAX Protein Protein Interaction Antibody Pair
DI0071	BID & BAX Protein Protein Interaction Antibody Pair
DI0072	BID & BCL2L1 Protein Protein Interaction Antibody Pair
DI0053	BUB1 & APC Protein Protein Interaction Antibody Pair
DI0055	CALR & APP Protein Protein Interaction Antibody Pair
DI0066	CALR & B2M Protein Protein Interaction Antibody Pair
DI0049	CASP3 & AKT3 Protein Protein Interaction Antibody Pair
DI0058	CASP3 & APP Protein Protein Interaction Antibody Pair
DI0085	CASP3 & CDKN1A Protein Protein Interaction Antibody Pair
DI0057	CASP6 & APP Protein Protein Interaction Antibody Pair
DI0079	CASP6 & CASP3 Protein Protein Interaction Antibody Pair
DI0023	CCNB1 & CDC25A Protein Protein Interaction Antibody Pair
DI0089	CCNB1 & CDKN1A Protein Protein Interaction Antibody Pair
DI0004	CCNB1 & PKMYT1 Protein Protein Interaction Antibody Pair
DI0033	CCNB1 & PLK1 Protein Protein Interaction Antibody Pair
DI0090	CCND2 & CDKN1A Protein Protein Interaction Antibody Pair
DI0064	CCND3 & AREG Protein Protein Interaction Antibody Pair
DI0093	CCND3 & CDKN1A Protein Protein Interaction Antibody Pair
DI0087	CCNE1 & CDKN1A Protein Protein Interaction Antibody Pair
DI0083	CD19 & CD82 Protein Protein Interaction Antibody Pair
DI0080	CD247 & CD3E Protein Protein Interaction Antibody Pair
DI0082	CD86 & CD80 Protein Protein Interaction Antibody Pair
DI0050	CDC20 & ANAPC11 Protein Protein Interaction Antibody Pair
DI0076	CDC20 & BUB1B Protein Protein Interaction Antibody Pair
DI0092	CDC45L & CDKN1A Protein Protein Interaction Antibody Pair
DI0094	CDC6 & CDKN1A Protein Protein Interaction Antibody Pair
DI0019	CDC6 & MCM7 Protein Protein Interaction Antibody Pair
DI0028	CDK2 & PCNA Protein Protein Interaction Antibody Pair
DI0016	CDK7 & E2F1 Protein Protein Interaction Antibody Pair
DI0047	CDK7 & MCM7 Protein Protein Interaction Antibody Pair
DI0078	CFLAR & CASP10 Protein Protein Interaction Antibody Pair
DI0003	CRKL & EGFR Protein Protein Interaction Antibody Pair
DI0024	CRKL & PTPN11 Protein Protein Interaction Antibody Pair
DI0002	CRKL & SOS1 Protein Protein Interaction Antibody Pair
DI0074	FADD & BID Protein Protein Interaction Antibody Pair
DI0022	FLT1 & CRK Protein Protein Interaction Antibody Pair
DI0010	FLT1 & CTNNB1 Protein Protein Interaction Antibody Pair
DI0018	FLT1 & PLCG1 Protein Protein Interaction Antibody Pair
DI0015	FLT1 & PTPN11 Protein Protein Interaction Antibody Pair
DI0044	GNAS & ADCY2 Protein Protein Interaction Antibody Pair
DI0014	HCK & PIK3CB Protein Protein Interaction Antibody Pair
DI0017	HCK & PLCG1 Protein Protein Interaction Antibody Pair
DI0009	HCK & SOS1 Protein Protein Interaction Antibody Pair
DI0046	HGF & MET Protein Protein Interaction Antibody Pair

Catalog #	Product Name
DI0102	HIP1 & CLTC Protein Protein Interaction Antibody Pair
DI0031	HSPB1 & EGFR Protein Protein Interaction Antibody Pair
DI0007	HSPB1 & F13A1 Protein Protein Interaction Antibody Pair
DI0096	IKKBK & CHUK Protein Protein Interaction Antibody Pair
DI0037	IL10 & A2M Protein Protein Interaction Antibody Pair
DI0035	IL1B & A2M Protein Protein Interaction Antibody Pair
DI0042	INHBB & ACVR1C Protein Protein Interaction Antibody Pair
DI0051	JUP & APC Protein Protein Interaction Antibody Pair
DI0036	KLK3 & A2M Protein Protein Interaction Antibody Pair
DI0081	LCK & CD55 Protein Protein Interaction Antibody Pair
DI0061	MAP3K5 & APP Protein Protein Interaction Antibody Pair
DI0099	MAP3K7 & CHUK Protein Protein Interaction Antibody Pair
DI0027	MAPK14 & EGFR Protein Protein Interaction Antibody Pair
DI0065	MAPK3 & ARRB2 Protein Protein Interaction Antibody Pair
DI0013	MAPK3 & CASP9 Protein Protein Interaction Antibody Pair
DI0008	MAPK3 & MAPK14 Protein Protein Interaction Antibody Pair
DI0030	MAPK3 & PTPN11 Protein Protein Interaction Antibody Pair
DI0038	MMP2 & A2M Protein Protein Interaction Antibody Pair
DI0067	MMP2 & BACE1 Protein Protein Interaction Antibody Pair
DI0039	NCK1 & ABL2 Protein Protein Interaction Antibody Pair
DI0075	NCK1 & BLNK Protein Protein Interaction Antibody Pair
DI0062	NEFL & APP Protein Protein Interaction Antibody Pair
DI0084	NFKB1 & CD82 Protein Protein Interaction Antibody Pair
DI0060	NUMB & APP Protein Protein Interaction Antibody Pair
DI0045	PDGFA & PLCG1 Protein Protein Interaction Antibody Pair
DI0025	PDGFRB & PLCG1 Protein Protein Interaction Antibody Pair
DI0034	PDGFRB & PTPN11 Protein Protein Interaction Antibody Pair
DI0021	PDGFRB & RAF1 Protein Protein Interaction Antibody Pair
DI0006	PDGFRB & SLC9A3R1 Protein Protein Interaction Antibody Pair
DI0095	PIAS2 & CDKN2B Protein Protein Interaction Antibody Pair
DI0063	PKM2 & ARAF Protein Protein Interaction Antibody Pair
DI0012	PLK1 & PKMYT1 Protein Protein Interaction Antibody Pair
DI0101	PPM1B & CHUK Protein Protein Interaction Antibody Pair
DI0048	PRKCZ & AKT3 Protein Protein Interaction Antibody Pair
DI0052	PTK2 & APC Protein Protein Interaction Antibody Pair
DI0020	PTK2 & CRKL Protein Protein Interaction Antibody Pair
DI0001	PTK2 & FLT1 Protein Protein Interaction Antibody Pair
DI0029	PTK2 & PLCG1 Protein Protein Interaction Antibody Pair
DI0077	SKP1 & CACYBP Protein Protein Interaction Antibody Pair
DI0091	SKP1 & CDKN1A Protein Protein Interaction Antibody Pair
DI0059	SNCA & APP Protein Protein Interaction Antibody Pair
DI0070	SNCA & BAX Protein Protein Interaction Antibody Pair
DI0043	TGFA & ADAM17 Protein Protein Interaction Antibody Pair
DI0054	TGFB1 & APP Protein Protein Interaction Antibody Pair
DI0056	TGFB2 & APP Protein Protein Interaction Antibody Pair
DI0069	TP53 & BAX Protein Protein Interaction Antibody Pair
DI0073	TP53 & BCR Protein Protein Interaction Antibody Pair
DI0086	TP53 & CDKN1A Protein Protein Interaction Antibody Pair
DI0041	TRAF2 & ACTG1 Protein Protein Interaction Antibody Pair
DI0098	TRAF2 & CHUK Protein Protein Interaction Antibody Pair
DI0040	VASP & ACTG1 Protein Protein Interaction Antibody Pair

For more product information

Visit www.abnova.com and search for: **protein protein interaction**