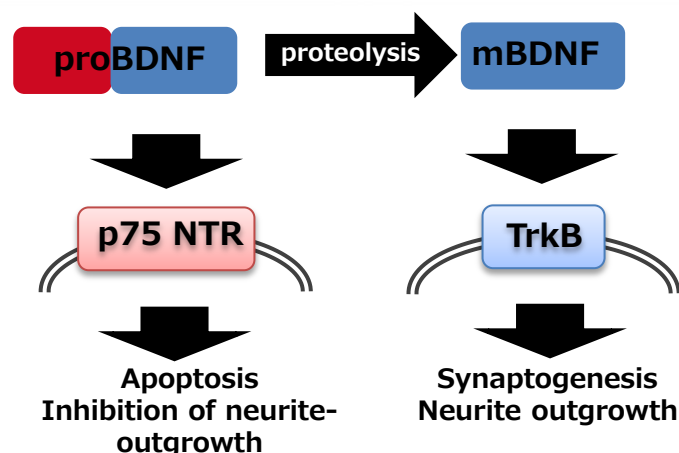


For neuroscience and biomarker research Mature BDNF ELISA Kit *Wako*, High Sensitive

“Mature BDNF Kit Wako, High Sensitive” is designed for the quantitative detection and measurement of mature BDNF in biological fluids such as mouse serum, and plasma. Brain-derived neurotrophic factor (BDNF) is a member of the NGF family of neurotrophic factors. BDNF is involved in neurogenesis and synaptogenesis and is expected as a biomarker for diseases of the nervous system. In addition, it has been reported to be related to heart disease, diabetes, gout, periodontal disease, stress, and exercise, etc. Therefore, BDNF is the target of research in a wide range of fields. BDNF has a precursor termed proBDNF, which is converted to mature BDNF (mBDNF) through the proteolytic removal of the N-terminal fragment by specific protease. There are different functions between mBDNF and proBDNF.



Features

- **Detects mBDNF level in mouse plasma/serum**
- **Detects mBDNF specifically**

Components

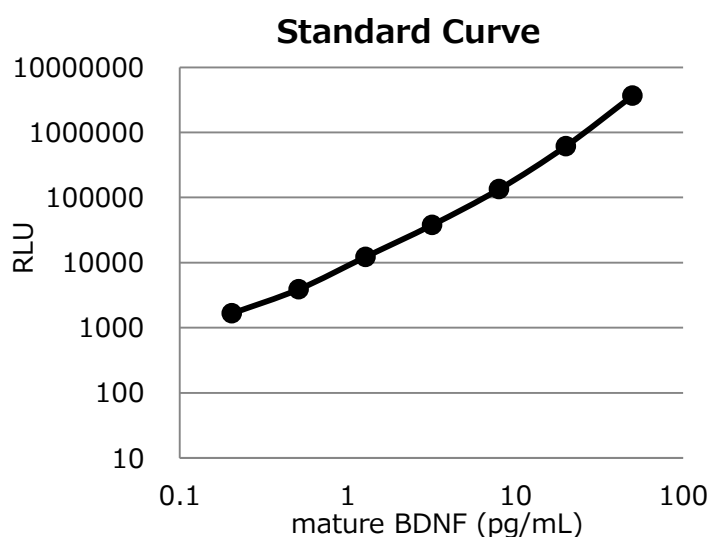
- | | |
|---|----------|
| (1) Antibody-coated Plate | 1Plate |
| (2) Mature BDNF Standard | 1 bottle |
| (3) Buffer | 60mL |
| (4) Biotin-conjugated Antibody Solution | 100μL |
| (5) Peroxidase-conjugated Streptavidin Solution | 100μL |
| (6) Luminescent Reagent 1 | 6mL |
| (7) Luminescent Reagent 2 | 6mL |
| (8) Wash Solution (10 x) | 100mL |
| (9) Plate Seal | 4 sheets |

Performance

Standard curve range	0.205~50 pg/mL
Specificity	mBDNF*
Sample	Mouse serum and plasma Rat serum and plasma **
Sample volume	13μL
Assay time	4 hours
Detection method	Luminescent method

*<0.5% reaction to human proBDNF

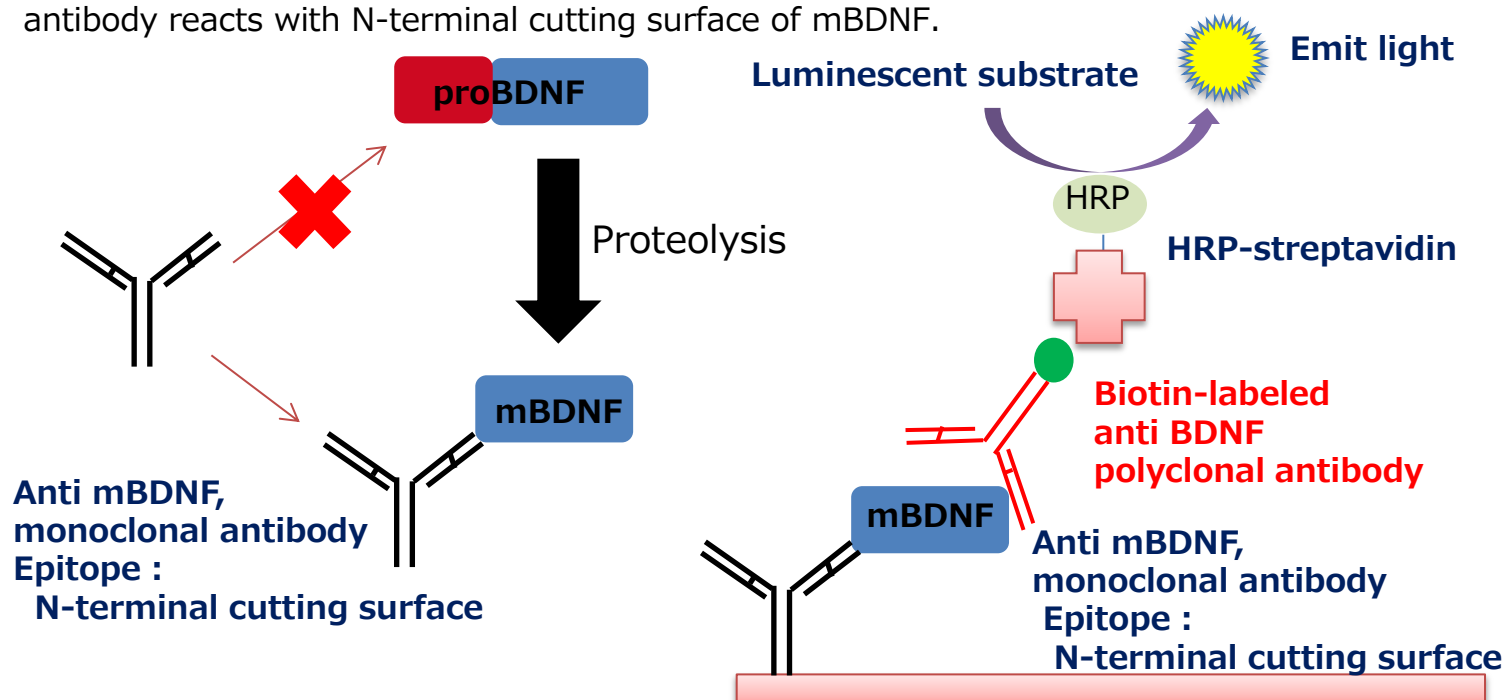
**This kit is used antibody reacts with human, mouse and rat BDNF.



Product Name	Wako Cat. No	Pkg. Size	Grade	Storage Condition
Mature BDNF ELISA Kit <i>Wako</i>, High Sensitive	298-83901	96 tests	For Immunochemistry	Keep at 2-10℃

Assay principal

This kit is a sandwich ELISA using mBDNF monoclonal antibody and mBDNF polyclonal antibody. The kit has low cross-reactivity to proBDNF (approx. 10%) because the monoclonal antibody reacts with N-terminal cutting surface of mBDNF.



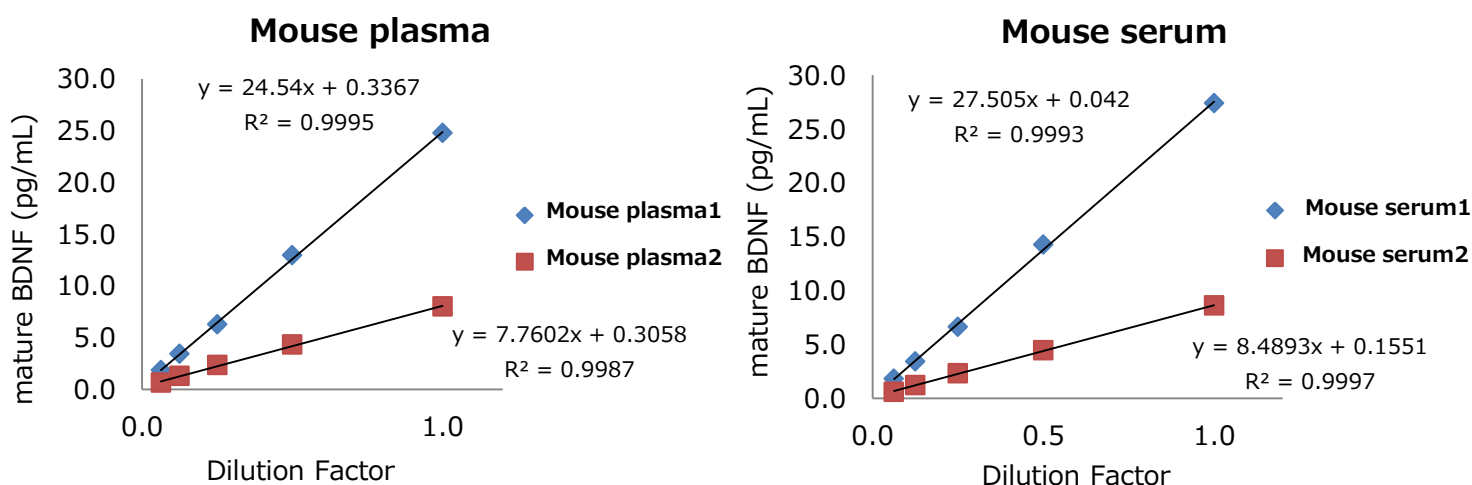
	Fujifilm Wako	Company A	Company B	Company C
Cross-reactivity to proBDNF	<0.5%	Approx. 10%	Approx. 15%	Approx. 50%
Sensitivity Lowest point of Standard curve	0.2pg/mL	62.5pg/mL	15.6pg/mL	15.0pg/mL

Spiked recovery test

Sample	Spike mBDNF (pg/mL)	Assay value (pg/mL)	Recovery volume (pg/mL)	Recovery (%)
Mouse plasma 1	0.0	0.622	—	—
	1.00	1.57	0.948	94.8
	10.0	10.5	9.88	98.8
	30.0	31.0	30.4	101
Mouse plasma 2	0.00	1.22	—	—
	0.50	1.77	0.550	110
	1.00	2.13	0.910	91.0
	10.0	11.5	10.3	103
Mouse serum 1	0.00	1.22	—	—
	0.50	1.77	0.550	110
	1.00	2.13	0.910	91.0
	10.0	11.5	10.3	103
Mouse serum 2	0.00	0.82	—	—
	0.50	1.32	0.500	100
	1.00	1.76	0.940	94.0
	10.0	10.5	9.68	96.8
Mouse serum 1	0	<0.205	—	—
	1.0	0.959	0.959	95.9
	10.0	10.0	10.0	100
	30.0	30.2	30.2	101

Sample	Spike mBDNF (pg/mL)	Assay value (pg/mL)	Recovery volume (pg/mL)	Recovery (%)
Rat pool plasma	0.0	<0.205	-	-
	1.0	1.06	1.06	106
	5.0	4.80	4.80	96.0
	10.0	10.5	10.5	105
	20.0	20.9	20.9	105
Rat pool serum	0.0	1.08	-	-
	1.0	2.13	1.05	105
	5.0	5.87	4.79	95.8
	10.0	10.6	9.52	95.2
	20.0	20.6	19.50	97.5

Dilution linearity



Example of measurement -autism model mouse sample -

Mouse serum/plasma mBDNF levels were measured by this kit. The all samples were able to detect mBDNF level.

Sample	Mouse	Sample No.	(pg/mL)
Serum	BTBR mouse*** (autism model mouse)	BTBR-1	12.4
		BTBR-2	18.1
		BTBR-3	16.1
	C57BL/6J (Wildtype mouse)	B6J-1	6.96
		B6J-2	9.80
		B6J-3	9.01
Plasma (heparin)	BTBR mouse*** (Autism model mouse)	BTBR-4	11.1
		BTBR-5	9.73
	C57BL/6J (Wildtype mouse)	B6J-4	6.93
		B6J-5	11.6

*** BTBR T+ Itpr3tf/J mouse

Comparison normal version product(Code No.296-83201)

Product	Mature BDNF ELISA Kit <i>Wako</i> , High Sensitive	Mature BDNF ELISA Kit <i>Wako</i>
Code No.	298-83901	296-83201
Standard curve range	0.205~50 pg/mL	4.1~1,000 pg/mL
Specificity	mature BDNF	mature BDNF
Cross-reactivity to human proBDNF	<0.5%	Apporox. 10%
Sample	Mouse serum and plasma Rat serum and plasma	Human serum and plasma
Sample volume	13 μ L (4 times dilution)	Serum : 10 μ L (10times dilution) plasma : 5 μ L (20times dilution)
Assay time	4 hours	4 hours
Detection method	Luminescent method	Colorimetric method

Related products

■ BDNF Antibody

Product Name	Wako Cat. No	Pkg. Size	Grade	Storage Condition
Anti BDNF, Monoclonal Antibody(2D7)	017-28071	100μL	For Immunochemistry	Keep at -20℃
Anti BDNF, Monoclonal Antibody(3C8)	014-28081	100μL	For Immunochemistry	Keep at -20℃

■ For Alzheimer's disease research

Aβ oligomer ELISA kit

Product Name	Wako Cat. No	Pkg. Size	Grade	Storage Condition
High Molecular Amyloid β Oligomer ELISA Kit Wako Ver.2	290-82001	96 tests	For Immunochemistry	Keep at 2-10℃

Aβ ELISA kit

Product Name	Wako Cat. No	Pkg. Size	Grade	Storage Condition
Human β Amyloid(1-40) ELISA Kit Wako	292-62301	96 tests	For Immunochemistry	Keep at 2-10℃
Human β Amyloid(1-40)ELISA Kit Wako II	298-64601	96 tests	For Immunochemistry	Keep at 2-10℃
Human/Rat β Amyloid(40)ELISA Kit Wako	294-62501	96 tests	For Immunochemistry	Keep at 2-10℃
Human/Rat βAmyloid(40)ELISA Kit Wako II	294-64701	96 tests	For Immunochemistry	Keep at 2-10℃
Human β Amyloid(1-42) ELISA Kit Wako	298-62401	96 tests	For Immunochemistry	Keep at 2-10℃
Human β Amyloid(1-42) ELISA Kit Wako, High Sensitive	296-64401	96 tests	For Immunochemistry	Keep at 2-10℃
Human/Rat β Amyloid(42)ELISA Kit Wako	290-62601	96 tests	For Immunochemistry	Keep at 2-10℃
Human/Rat β Amyloid(42) ELISA Kit Wako, High Sensitive	292-64501	96 tests	For Immunochemistry	Keep at 2-10℃

Tau ELISA kit

Product Name	Wako Cat. No	Pkg. Size	Grade	Storage Condition
Tau ELISA Kit Wako	296-80401	96 tests	For Immunochemistry	Keep at 2-10℃
Phosphorylated Tau T181 ELISA Kit Wako	298-81701	96 tests	For Immunochemistry	Keep at 2-10℃

Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit FUJIFILM Wako Laboratory Chemicals site: <https://labchem-wako.fujifilm.com/> / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

FUJIFILM Wako Laboratory Chemicals site
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