

## Brilliant Violet 421™ anti-human/mouse CD266 (Fn14, TWEAK R) Antibody

<b>Catalog# / Size</b>	314109 / 25 tests 314110 / 100 tests
<b>Clone</b>	ITEM-4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Fibroblast growth factor-inducible 14 kD protein (Fn14), TWEAK receptor, TNFRSF12A
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	CD266 is a 14 kD transmembrane protein known as TWEAK receptor (TWEAK-R) or fibroblast growth factor inducible 14 (Fn14). It is member 12A of the tumor necrosis factor receptor superfamily (TNFRSF12A) expressed at low levels in a variety of tissues, such as heart, placenta, lung, muscle, and pancreas. TWEAK-R binds TWEAK (CD255) and interacts with the cytoplasmic proteins TRAF1, 2, and 3. The engagement of Fn14 can induce cell death and may play a role in inflammation, hepatocyte growth, and liver neoplasia.

### Product Details

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<b>Verified Reactivity</b>	Human, Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human Fn14 transfected P815
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a>. For flow cytometric staining, the suggested use of this reagent is 5 <math>\mu</math>L per million cells in 100 <math>\mu</math>L staining volume or 5 <math>\mu</math>L per 100 <math>\mu</math>L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: Western blotting <sup>3,4</sup> , immunofluorescence <sup>3,4</sup> , and immunohistochemistry of frozen sections <sup>5</sup> and formalin-fixed paraffin-

embedded sections<sup>3</sup>. ITEM-4 antibody has no effect on TWEAK-induced MAPK activation in RAW cells<sup>1</sup>.

#### Application References

(PubMed link indicates BioLegend citation)

1. Polek TC, *et al.* 2003. *J. Biol. Chem.* 278:32317.
2. Nakayama M, *et al.* 2003. *J. Immunol.* 170:341.
3. Karaca G, *et al.* 2014. *PLoS One.* 9:83987. (IHC, IF, WB) [PubMed](#)
4. Muñoz-García B, *et al.* 2006. *Stroke.* 37:2044. (IF, WB)
5. Jakubowski A, *et al.* 2005. *J. Clin. Invest.* 115:2955. (IHC)
6. Karaca G, *et al.* 2015. *Am J Physiol Gastrointest Liver Physiol.* 308:325. [PubMed](#)

#### RRID

AB\_3683328 (BioLegend Cat. No. 314109)  
AB\_3683328 (BioLegend Cat. No. 314110)

## Antigen Details

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<b>Structure</b>	Transmembrane TNF superfamily receptor, contains no death domain, 14 kD
<b>Distribution</b>	Widely expressed in heart, placenta, lung, muscle, kidney, pancreas, and HUVEC
<b>Function</b>	Binds to TWEAK (CD255), thought to play a role in cell death and inflammation
<b>Ligand/Receptor</b>	TWEAK (CD255); interacts with cytoplasmic proteins TRAF1, 2, and 3
<b>Biology Area</b>	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Feng SL, <i>et al.</i> 2000. <i>Am. J. Path.</i> 156:1253.</li><li>2. Meighan-Mantha RL, <i>et al.</i> 1999. <i>J. Biol. Chem.</i> 274:33166.</li><li>3. Nakayama M, <i>et al.</i> 2003. <i>J. Immunol.</i> 170:341.</li><li>4. Lynch CN, <i>et al.</i> 1999. <i>J. Biol. Chem.</i> 274:8455.</li></ol>

#### Gene ID

[27279](#)  
[51330](#)

## Related Protocols

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- [Cell Surface Flow Cytometry Staining Protocol](#)

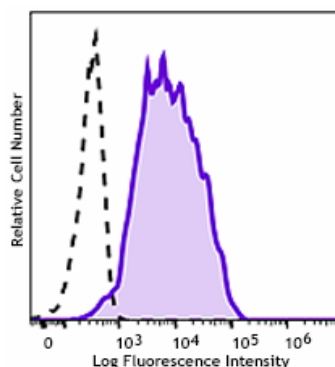
## Other Formats

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Purified anti-human/mouse CD266 (Fn14, TWEAK R), Biotin anti-human/mouse CD266 (Fn14, TWEAK R), PE anti-human/mouse CD266 (Fn14, TWEAK R), APC anti-human/mouse CD266 (Fn14, TWEAK R), Brilliant Violet 421™ anti-human/mouse CD266 (Fn14, TWEAK R)

## Product Data

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Human Fn14 transfected cells were stained with anti-human/mouse CD266 (Fn14, TWEAK R) (clone ITEM-4) Brilliant Violet 421™ (filled histogram) or mouse IgG2b, κ Brilliant Violet 421™ isotype control (open histogram).

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