# **Product Datasheet**

## DIO3 Antibody - BSA Free NBP1-05767

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.



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Updated 10/23/2024 v.20.1

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## NBP1-05767

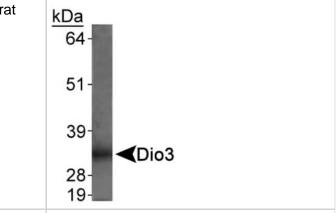
DIO3 Antibody - BSA Free

0.1 ml		
1 mg/ml		
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.		
Polyclonal		
0.02% Sodium Azide		
IgG		
Immunogen affinity purified		
PBS		
31 kDa		
Rabbit		
1735		
DIO3		
Human, Mouse, Rat, Hamster, Rabbit		
Rabbit reactivity via customer review.		
Synthetic peptide made to an internal portion of rat DIO3 (within residues 250- 300). [Swiss-Prot# P49897]		
Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry- Paraffin		
Western Blot 0.5 ug/ml, Flow Cytometry reported by customer review using biotinylated antibody, Immunohistochemistry reported in scientific literature (PMID 24174657), Immunocytochemistry/ Immunofluorescence reported in scientific literature (PMID 24885572), Immunohistochemistry-Paraffin reported in scientific literature (PMID 25004090), Immunohistochemistry-Frozen reported in scientific literature (PMID 24885572)		
In Western blot, a band is seen ~31 kDa. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.		



#### Images

Western Blot: DIO3 Antibody [NBP1-05767] - Detection of Dio3 in rat placenta.



Moune hematic stellate cells cultured for 7 days

Flow Cytometry: DIO3 Antibody [NBP1-05767] - Analysis using the Biotin conjugate of NBP1-05767. Dio3 staining of mouse hepatic stellate cell cultured for 7 days. Image from verified customer review.

Western Blot: DIO3 Antibody [NBP1-05767] - Detection of Dio3 in rabbit brain whole cell homogenate. Photo courtesy of product review by verified customer.

3d	7d	14d	+	
			-	75kd
				50
			-	37
				25 20

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#### **Publications**

Nascimento BPP, Bocco BMLC, Fernandes GW et al. Induction of type 2 iodothyronine deiodinase after status epilepticus modifies hippocampal gene expression in male mice Endocrinology 2018-06-13 [PMID: 29905787]

Lavecchia AM, Mantzouratou P, Cerullo D et al. Thyroid hormone treatment counteracts cellular phenotypical remodeling in diabetic organs iScience 2023-10-20 [PMID: 37752946] (Immunohistochemistry)

Peluso T, Nittoli V, Reale C et al. Chronic Exposure to Chlorpyrifos Damages Thyroid Activity and Imbalances Hepatic Thyroid Hormones Signaling and Glucose Metabolism: Dependency of T3-FOXO1 Axis by Hyperglycemia International journal of molecular sciences 2023-05-31 [PMID: 37298533] (WB, Mouse)

Details:

Dilution: 1:3000

Salas-Lucia F, Fekete C, Sinkó R et al. Axonal T3 uptake and transport can trigger thyroid hormone signaling in the brain eLife 2023-05-19 [PMID: 37204837] (ICC/IF, IHC, Mouse, Rat)

Kohon MY, Zaaroor Levy M, Hornik-Lurie T et al. ?v?3 Integrin as a Link between the Development of Fibrosis and Thyroid Hormones in Systemic Sclerosis International journal of molecular sciences 2023-05-18 [PMID: 37240272] (WB, Human)

Agarwal S, Koh KH, Tardi NJ Et al. Deiodinase-3 is a thyrostat to regulate podocyte homeostasis EBioMedicine 2021-10-01 [PMID: 34649077] (WB, ICC/IF, PLA, Mouse, Human)

Devalraju Kp, Tripathi D, Neela Vsk Et Al. Reduced thyroxine production in young household contacts of tuberculosis patients increases active tuberculosis disease risk JCI insight 2021-07-08 [PMID: 34236051] (WB)

Benedetti V, Lavecchia AM, Locatelli M et al. Alteration of thyroid hormone signaling triggers the diabetes-induced pathological growth, remodeling, and dedifferentiation of podocytes JCI Insight 2019-09-19 [PMID: 31534055] (IHC-P, Rat)

Porings AS, Lowin T, Dufner B et al. A thyroid hormone network exists in synovial fibroblasts of rheumatoid arthritis and osteoarthritis patients Sci Rep [PMID: 31519956] (IHC-Fr, Human)

Calonne J, Isacco L, Miles-Chan J et al. Reduced Skeletal Muscle Protein Turnover and Thyroid Hormone Metabolism in Adaptive Thermogenesis That Facilitates Body Fat Recovery During Weight Regain Front Endocrinol (Lausanne) 2019-02-28 [PMID: 30873123] (WB, Rat)

Yamauchi I, Sakane Y, Yamashita T et al. Effects of growth hormone on thyroid function are mediated by type 2 iodothyronine deiodinase in humans. Endocrine 2017-12-22 [PMID: 29274063] (WB, Human)

De Andrade PB, Neff LA, Strosova MK et al. Caloric restriction induces energy-sparing alterations in skeletal muscle contraction, fiber composition and local thyroid hormone metabolism that persist during catch-up fat upon refeeding. Front Physiol 2015-01-01 [PMID: 26441673]

More publications at <u>http://www.novusbio.com/NBP1-05767</u>

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#### **Procedures**

#### Immunohistochemistry-Paraffin Protocol for DIO3 Antibody (NBP1-05767)

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer at all times).

Staining:

- 1. Wash sections in deionized water three times for 5 minutes each.
- 2. Wash sections in PBS for 5 minutes.
- 3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
- 4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
- 5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
- 6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
- 7. Wash sections three times in wash buffer for 5 minutes each.
- 8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
- 9. As soon as the sections develop, immerse slides in deionized water.
- 10. Counterstain sections in hematoxylin.
- 11. Wash sections in deionized water two times for 5 minutes each.
- 12. Dehydrate sections.
- 13. Mount coverslips.





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## Products Related to NBP1-05767

NBP1-05767PEP	DIO3 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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