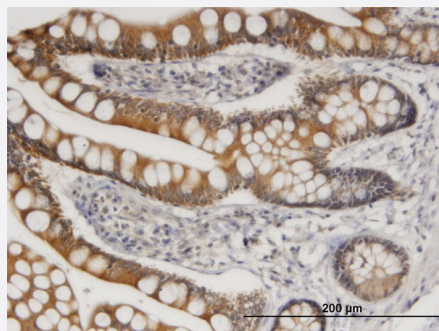


TLR4 monoclonal antibody (M02), clone 3B6

Catalog # H00007099-M02

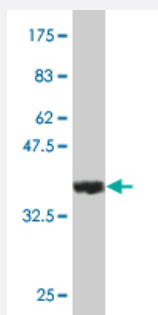
Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to TLR4 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 1.5 ug/ml]



Western Blot detection against Immunogen (34.32 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant TLR4.
Immunogen	TLR4 (NP_612564, 214 a.a. ~ 291 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	PMNFIQPGAFKEIRLHKLTLRNNFDSLNVMTKCIQGLAGLEVHRLVLGGEFRNEGNLEKFDKSALEG LCNLTIEEFRLA
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa

Quality Control Testing

Antibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (34.32 KDa) .

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to TLR4 on formalin-fixed paraffin-embedded human small intestine. [antibody concentration 1.5 ug/ml]

[Protocol Download](#)

- ELISA

Gene Info — TLR4

Entrez GeneID

[7099](#)

GeneBank Accession#

[NM_138554](#)

Protein Accession#

[NP_612564](#)

Gene Name

TLR4

Gene Alias

ARMD10, CD284, TOLL, hToll

Gene Description

toll-like receptor 4

Omim ID

[603030](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta, and in myelomonocytic subpopulation of the leukocytes. It has been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness. Also, several transcript variants of this gene have been found, but the protein coding potential of most of them is uncertain. [provided by RefSeq]

Other Designations

OTTHUMP00000022807|homolog of Drosophila toll

Publication Reference

- [Pathophysiology of reflux oesophagitis: role of Toll-like receptors 2 and 4 and Farnesoid X receptor.](#)

Minna Nortunen, Nina Väkiparta, Katja Porvari, Juha Saarnio, Tuomo J Karttunen, Heikki Huhta.

Virchows Archiv : an International Journal of Pathology 2021 Aug; 479(2):285.

Application: IHC-P, Human, Oesophageal biopsy samples from patients with gastroesophageal reflux disease

- [Toll-like receptors 2, 4 and 9 and hypoxia markers HIF-1alpha and CAIX in pancreatic intraepithelial neoplasia.](#)

Leppänen J, Helminen O, Huhta H, Kauppila JH, Isohookana J, Haapasaari KM, Karihtala P, Parkkila S, Saarnio J, Lehenkari PP, Karttunen TJ.

APMIS : Acta Pathologica, Microbiologica, et Immunologica Scandinavica 2018 Nov; 126(11):852.

Application: IHC-P, Human, Human pancreatic intraepithelial neoplasia

- [Toll-like receptor 2 and Toll-like receptor 4 predict favorable prognosis in local pancreatic cancer.](#)

Lanki MA, Seppänen HE, Mustonen HK, Böckelman C, Juuti AT, Hagström JK, Haglund CH.

Tumour Biology : the Journal of the International Society for Oncodevelopmental Biology and Medicine 2018 Sep; 40(9):1010428318.

Application: IHC-P, Human, Human pancreatic cancer

- [Divergent expression of bacterial wall sensing Toll-like receptors 2 and 4 in colorectal cancer.](#)

Paarnio K, Väyrynen S, Klintrup K, Ohtonen P, Mäkinen MJ, Mäkelä J, Karttunen TJ.

World Journal of Gastroenterology 2017 Jul; 23(26):4831.

Application: IHC-P, Human, Human colorectal cancer

- [High toll-like receptor \(TLR\) 9 expression is associated with better prognosis in surgically treated pancreatic cancer patients.](#)

Leppänen J, Helminen O, Huhta H, Kauppila JH, Isohookana J, Haapasaari KM, Lehenkari P, Saarnio J, Karttunen TJ.

Virchows Archiv : an International Journal of Pathology 2017 Feb; 470(4):401.

Application: IHC-P, Human, Human pancreatic cancer

- [Cathepsin K expression is increased in oral lichen planus.](#)

Siponen M, Bitu CC, Al-Samadi A, Nieminen P, Salo T.

Journal of Oral Pathology & Medicine 2016 Nov; 45(10):758.

Application: IHC-P, Human, Oral lichen planus

- [Toll-Like Receptor 4 Wild Type Homozygosity of Polymorphisms +896 and +1196 Is Associated with High Gastrin Serum Levels and Peptic Ulcer Risk.](#)

Pohjanen VM, Koivurova OP, Huhta H, Helminen O, Makinen JM, Karhukorpi JM, Joensuu T, Koistinen PO, Valtonen JM, Niemela SE, Karttunen RA, Karttunen TJ.

PloS One 2015 Jul; 10(7):e0131553.

Application: IHC-P, Human, Body glands

Pathway

- [Pathogenic Escherichia coli infection - EHEC](#)
- [Toll-like receptor signaling pathway](#)

Disease

- [Abortion](#)
- [Achlorhydria](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Aggressive Periodontitis](#)
- [AIDS-Related Opportunistic Infections](#)
- [Airway Obstruction](#)
- [Albuminuria](#)

- [Alveolar Bone Loss](#)
- [Alzheimer disease](#)
- [Amyloidosis](#)
- [Anemia](#)
- [Angina Pectoris](#)
- [Anus Diseases](#)
- [Aortic Diseases](#)
- [Appendicitis](#)
- [Arteriosclerosis](#)
- [Arthritis](#)
- [Arthropathy](#)
- [Aspergillosis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Autoimmune Diseases](#)
- [Bacteremia](#)
- [Bacterial Infections](#)
- [Bacteriuria](#)
- [Behcet Syndrome](#)
- [Birth Weight](#)
- [Boutonneuse Fever](#)
- [Brain Infarction](#)
- [Brain Ischemia](#)
- [Breast Neoplasms](#)

- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Bronchiolitis Obliterans](#)
- [Brucellosis](#)
- [Burns](#)
- [Calcinosis](#)
- [Campylobacter Infections](#)
- [Candidiasis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Carotid Stenosis](#)
- [Celiac Disease](#)
- [Cellulitis](#)
- [Cerebral Palsy](#)
- [Cerebrovascular Accident](#)
- [Chagas Cardiomyopathy](#)
- [Chlamydia Infections](#)
- [Cholangitis](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)

- [Conjunctivitis](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Restenosis](#)
- [Coronary Stenosis](#)
- [Critical Illness](#)
- [Crohn Disease](#)
- [Cross Infection](#)
- [Cystic fibrosis](#)
- [Cystitis](#)
- [Cytomegalovirus Infections](#)
- [Death](#)
- [Dementia](#)
- [Dental Plaque](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Neuropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Ductus Arteriosus](#)
- [Duodenal Ulcer](#)
- [Eczema](#)
- [Edema](#)

- [Elephantiasis](#)
- [Endotoxemia](#)
- [Enterocolitis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Fallopian Tube Diseases](#)
- [Familial Mediterranean fever](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Food Hypersensitivity](#)
- [Fractures](#)
- [Fungemia](#)
- [Gallbladder Neoplasms](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Giant Cell Arteritis](#)
- [Gingival Hemorrhage](#)
- [Glaucoma](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Graft vs Host Disease](#)
- [Gram-Negative Bacterial Infections](#)
- [Graves Ophthalmopathy](#)
- [Guillain-Barre Syndrome](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)

- [HELLP Syndrome](#)
- [Hematologic Diseases](#)
- [Hematologic Neoplasms](#)
- [Hemochromatosis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Humeral Fractures](#)
- [Hypercholesterolemia](#)
- [Hyperlipoproteinemia Type II](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Infant](#)
- [Infection](#)
- [Infertility](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Leprosy](#)
- [Leukemia](#)
- [Lipodystrophy](#)
- [Liver Cirrhosis](#)

- [Liver Diseases](#)
- [Lung Diseases](#)
- [Lupus Erythematosus](#)
- [Lymphadenitis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Macular Degeneration](#)
- [Malaria](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Meningococcal Infections](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Multiple Myeloma](#)
- [Multiple Organ Failure](#)
- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Mycobacterium Infections](#)
- [Mycoses](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Necrosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Nephritis](#)

- [Neurocysticercosis](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Opportunistic Infections](#)
- [Otitis Media](#)
- [Otosclerosis](#)
- [Pancreatitis](#)
- [Papillomavirus Infections](#)
- [Parasitemia](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Diseases](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Peripheral Vascular Diseases](#)
- [Pneumococcal Infections](#)
- [Pneumonia](#)
- [Polymyalgia Rheumatica](#)
- [Postoperative Complications](#)
- [Pouchitis](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)

- [Puerperal Disorders](#)
- [Pulmonary Disease](#)
- [Purpura](#)
- [Pyelonephritis](#)
- [Q Fever](#)
- [Rectal Fistula](#)
- [Recurrence](#)
- [Reperfusion Injury](#)
- [Respiratory Sounds](#)
- [Respiratory Syncytial Virus Infections](#)
- [Rheumatic Heart Disease](#)
- [Rhinitis](#)
- [Salmonella Infections](#)
- [Sarcoidosis](#)
- [Sepsis](#)
- [Shock](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Spondylitis](#)
- [Stomach Neoplasms](#)
- [Streptococcal Infections](#)
- [Stroke](#)
- [Systemic Inflammatory Response Syndrome](#)
- [Thrombosis](#)
- [Tooth Abnormalities](#)
- [Toxoplasmosis](#)

- [Tuberculosis](#)
- [Tympanic Membrane Perforation](#)
- [Typhoid Fever](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Tract Infections](#)
- [Uterine Cervical Neoplasms](#)
- [Uveitis](#)
- [Vaginal Diseases](#)
- [Vaginosis](#)
- [Virus Diseases](#)
- [Vision](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)
- [Wounds and Injuries](#)