

# Immunotag™ Raf-B Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITT3986                                                                                                                                                            |
| Product Description    | Immunotag™ Raf-B Polyclonal Antibody                                                                                                                               |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | Raf-B                                                                                                                                                              |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | IHC-p,ELISA                                                                                                                                                        |
| Recommended Dilution   | Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.                                                                          |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | The antiserum was produced against synthesized peptide derived from human B-RAF. AA range:571-620                                                                  |
| Specificity            | Raf-B Polyclonal Antibody detects endogenous levels of Raf-B protein.                                                                                              |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                            |
| Gene Name              | BRAF                                                                                                                                                               |
| Accession No.          | P15056 P28028                                                                                                                                                      |
| Alternate Names        | BRAF; BRAF1; RAFB1; Serine/threonine-protein kinase B-raf; Proto-oncogene B-Raf; p94; v-Raf murine sarcoma viral oncogene homolog B1                               |

## Antibody Specification

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                 | B-Raf proto-oncogene, serine/threonine kinase(BRAF) Homo sapiens This gene encodes a protein belonging to the raf/mil family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene are associated with cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance. Mutations in this gene have also been associated with various cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, thyroid carcinoma, non-small cell lung carcinoma, and adenocarcinoma of lung. A pseudogene, which is located on chromosome X, has been identified for this gene. [provided by RefSeq, Jul 2008],                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Cell Pathway/<br>Category   | Regulation of Actin Dynamics, MAPK_ERK_Growth,MAPK_G_Protein, Cell Growth, mTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protein<br>Expression       | Colon carcinoma,Epithelium,Hepatoma,Liver,Placenta,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Subcellular<br>Localization | nucleus,cytoplasm,mitochondrion,cytosol,plasma membrane,neuron projection,intracellular membrane-bounded organelle,cell body,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Protein Function            | catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 2 zinc ions per subunit.,disease:Defects in BRAF are a cause of cardiofaciocutaneous syndrome (CFC syndrome) [MIM:115150]; also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.,disease:Defects in BRAF are involved in a wide range of cancers.,disease:Defects in BRAF are involved in lung cancer [MIM:211980].,disease:Defects in BRAF are involved in non-Hodgkin lymphoma (NHL) [MIM:605027]. NHL is a cancer that starts in cells of the lymph system, which is part of the body's immune system. NHLs can occur at any age and are often marked by enlarged lymph nodes, fever and weight loss.,disease:Defects in BRAF may be a cause of colorectal cancer (CRC) [MIM:114500].,function:Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. May play a role in the postsynaptic responses of hippocampal neuron.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. RAF subfamily.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 RBD (Ras-binding) domain.,subunit:Interacts with RIT1.,tissue specificity:Brain and testis., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |